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Alabama Department of Environmental Management  
adem.alabama.gov

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Montgomery, Alabama 36130-1463  
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April 06, 2018

Gail Beaird  
President  
Cordova Clay Co., Inc.  
P O Box 100  
Cordova, AL 35550

RE: Draft Permit  
Riceton Hill Mine  
NPDES Permit No. AL0047198  
Walker County (127)

Dear Mr. Beaird:

Transmitted herein is a draft of the above referenced permit. Please review the enclosed draft permit carefully. If previously permitted, the draft may contain additions/revisions to the language in your current permit. Please submit any comments on the draft permit to the Department within 30 days from the date of receipt of this letter.

Since the Department has made a tentative decision to reissue the above referenced permit, ADEM Admin. Code r. 335-6-6-.21 requires a public notice of the draft permit followed by a period of at least 30 days for public comment before the permit can be issued. The United States Environmental Protection Agency will also receive the draft permit for review during the 30-day public comment period.

Any mining, processing, construction, land disturbance, or other regulated activity proposed to be authorized by this draft permit is prohibited prior to the effective date of the formal permit. Any mining or processing activity within the drainage basin associated with each permitted outfall which is conducted prior to Departmental receipt of certification from a professional engineer licensed to practice in the State of Alabama, that the Pollution Abatement/Prevention Plan was implemented according to the design plan, or notification from the Alabama Surface Mining Commission that the sediment control structures have been certified, is prohibited.

The Department utilizes a web-based electronic environmental (E2) reporting system for electronic DMR submittal. Please read Part I.D of the permit carefully and visit <https://e2.adem.alabama.gov/npdes>.

Should you have any questions concerning this matter, please contact David Hearn by email at [david.hearn@adem.alabama.gov](mailto:david.hearn@adem.alabama.gov) or by phone at (334) 274-4231.

Sincerely,

A handwritten signature in black ink, appearing to read "Catherine A. McNeill", is written over a horizontal line.

Catherine A. McNeill, Chief  
Mining and Natural Resource Section  
Stormwater Management Branch  
Water Division

CAM/dnl File: DPER/16823

Enclosure

cc: David Hearn, ADEM  
Environmental Protection Agency Region IV  
Alabama Department of Conservation and Natural Resources  
U.S. Fish and Wildlife Service  
Alabama Historical Commission  
Advisory Council on Historic Preservation  
Alabama Surface Mining Commission  
Alabama Department of Labor

Birmingham Branch  
110 Vulcan Road  
Birmingham, AL 35209-4702  
(205) 942-6168  
(205) 941-1603 (FAX)

Decatur Branch  
2715 Sandlin Road, S.W.  
Decatur, AL 35603-1333  
(256) 353-1713  
(256) 340-9359 (FAX)



Mobile Branch  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400  
(251) 479-2593 (FAX)

Mobile-Coastal  
3864 Dauphin Street, Suite B  
Mobile, AL 36608  
(251) 304-1178  
(251) 304-1189 (FAX)



# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

PERMITTEE: Cordova Clay Co., Inc.  
Post Office Box 100  
Cordova, AL 35550

FACILITY LOCATION: Riceton Hill Mine  
3781 River Road  
Cordova, AL 35550  
Walker County  
T14S, R6W, S34  
T15S, R6W, S3

PERMIT NUMBER: AL0047198

DSN & RECEIVING STREAM:

004-1 Unnamed Tributary to Mulberry Fork

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1388 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-17, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

**\*\* DRAFT \*\***

Alabama Department of Environmental Management

**MINING AND NATURAL RESOURCE SECTION**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT**

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## PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

### A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from Outfall 004-1 identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfall has been constructed and certified. Discharges from Outfall 004-1 shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations			Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency <sup>1</sup>
Specific Conductance 00095	-----	Report μS/cm	Report μS/cm	Grab	2/Month
Sulfate (As S) 00154	-----	Report mg/L	Report mg/L	Grab	2/Month
pH 00400	6.0 s.u.	-----	9.0 s.u.	Grab	2/Month
Solids, Total Suspended 00530	-----	-----	35.0 mg/L	Grab	2/Month
Selenium, Total Recoverable 00981	-----	5.0 μg/L	20.0 μg/L	Grab	1/Month
Iron, Total (As Fe) 01045	-----	3.0 mg/L	6.0 mg/L	Grab	2/Month
Manganese, Total (As Mn) <sup>2</sup> 01055	-----	2.0 mg/L	4.0 mg/L	Grab	2/Month
Flow, In Conduit or Thru Treatment Plant <sup>3</sup> 50050	-----	Report MGD	Report MGD	Instantaneous	2/Month
Solids, Total Dissolved (TDS) 70296	-----	Report mg/L	Report mg/L	Grab	1/Quarter

### B. REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL

1. Discharge from any point source identified on Page 1 of this Permit which is a proposed outfall is not authorized by this Permit until the outfall has been constructed and certification received by the Department from a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed according to good engineering practices and in accordance with the Pollution Abatement and/or Prevention (PAP) Plan.
2. Certification required by Part I.B.1. shall be submitted on a completed ADEM Form 432. The certification shall include the latitude and longitude of the constructed and certified outfall.
3. Discharge monitoring and Discharge Monitoring Report (DMR) reporting requirements described in Part I.C. of this Permit do not apply to point sources that have not been constructed and certified.

<sup>1</sup> See Part I C.2. for further measurement frequency requirements

<sup>2</sup> See Part IV B. for Manganese Exemption Discharge Limitations

<sup>3</sup> Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department

4. Upon submittal of the certification required by Part I.B.1. to the Department, all monitoring and DMR submittal requirements shall apply to the constructed and certified outfall.

## **C. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS**

### **1. Sampling Schedule and Frequency**

- a. The Permittee shall collect at least one grab sample of the discharge to surface waters from each constructed and certified point source identified on Page 1 of this Permit and described more fully in the Permittee's application twice per month at a rate of at least every other week if a discharge occurs at any time during the two week period, but need not collect more than two samples per calendar month. Each sample collected shall be analyzed for each parameter specified in Part I.A. of this Permit.
- b. If the final effluent is pumped in order to discharge (e.g. from incised ponds, old highwall cuts, old pit areas or depressions, etc.), the Permittee shall collect at least one grab sample of the discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application each quarterly (three month) monitoring period if a discharge occurs at any time during the quarterly monitoring period which results from direct pumped drainage. Each sample collected shall be analyzed for each parameter specified in Part I.A. of this Permit.
- c. The Permittee may increase the frequency of sampling listed in Parts I.C.1.a and I.C.1.b; however, all sampling results must be reported to the Department and included in any calculated results submitted to the Department in accordance with this Permit.

### **2. Measurement Frequency**

Measurement frequency requirements found in Part I.A. shall mean:

- a. A measurement frequency of one day per week shall mean sample collection on any day of discharge which occurs every calendar week.
- b. A measurement frequency of two days per month shall mean sample collection on any day of discharge which occurs every other week, but need not exceed two sample days per month.
- c. A measurement frequency of one day per month shall mean sample collection on any day of discharge which occurs during each calendar month.
- d. A measurement frequency of one day per quarter shall mean sample collection on any day of discharge which occurs during each calendar quarter.
- e. A measurement frequency of one day per six months shall mean sample collection on any day of discharge which occurs during the period of January through June and during the period of July through December.
- f. A measurement frequency of one day per year shall mean sample collection on any day of discharge which occurs during each calendar year.

### **3. Monitoring Schedule**

The Permittee shall conduct the monitoring required by Part I.A. in accordance with the following schedule:

- a. MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this Permit and every month thereafter. More frequently than monthly and monthly monitoring may be done anytime during the month, unless restricted elsewhere in this Permit, but the results should be reported on the last Discharge Monitoring Report (DMR) due for the quarter (i.e., with the March, June, September, and December DMRs).
- b. QUARTERLY MONITORING shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this Permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring may be done anytime during the quarter, unless restricted elsewhere in this Permit, but the results should be reported on the last DMR due for the quarter (i.e., with the March, June, September, and December DMRs).
- c. SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete semiannual calendar period following the effective date of this Permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this Permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., with the June and December DMRs).
- d. ANNUAL MONITORING shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this Permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this Permit, but it should be reported on the December DMR.

4. **Sampling Location**

Unless restricted elsewhere in this Permit, samples collected to comply with the monitoring requirements specified in Part I.A. shall be collected at the nearest accessible location just prior to discharge and after final treatment, or at an alternate location approved in writing by the Department.

5. **Representative Sampling**

Sample collection and measurement actions taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this Permit.

6. **Test Procedures**

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136, guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h), and ADEM Standard Operating Procedures. If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than

the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this Permit the Permittee shall use the newly approved method.

- b. For pollutant parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

- c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit using the most sensitive EPA approved method. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures identified in Parts I.C.6.a. and b. shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

## **7. Recording of Results**

For each measurement or sample taken pursuant to the requirements of this Permit, the Permittee shall record the following information:

- a. The facility name and location, point source number, date, time, and exact place of sampling or measurements;
- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used including source of method and method number; and
- f. The results of all required analyses

## **8. Routine Inspection by Permittee**

- a. The Permittee shall inspect all point sources identified on Page 1 of this Permit and described more fully in the Permittee's application and all treatment or control facilities or systems used by the Permittee to achieve compliance with the terms and conditions of this Permit at least as often as the applicable sampling frequency specified in Part I.C.1 of this Permit.

- b. If required by the Director, the Permittee shall maintain a written log for each point source identified on Page I of this Permit and described more fully in the Permittee's application in which the Permittee shall record the following information:
  - (1) The date and time the point source and any associated treatment or control facilities or systems were inspected by the Permittee;
  - (2) Whether there was a discharge from the point source at the time of inspection by the Permittee;
  - (3) Whether a sample of the discharge from the point source was collected at the time of inspection by the Permittee;
  - (4) Whether all associated treatment or control facilities or systems appeared to be in good working order and operating as efficiently as possible, and if not, a description of the problems or deficiencies; and
  - (5) The name and signature of the person performing the inspection of the point source and associated treatment or control facilities or systems.

**9. Records Retention and Production**

- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the above reports or the application for this Permit, for a period of at least three (3) years from the date of the sample collection, measurement, report, or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA, AEMA, and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
- b. All records required to be kept for a period of three (3) years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

**10. Monitoring Equipment and Instrumentation**

All equipment and instrumentation used to determine compliance with the requirements of this Permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. The Permittee shall develop and maintain quality assurance procedures to ensure proper operation and maintenance of all equipment and instrumentation. The quality assurance procedures shall include the proper use, maintenance, and installation, when appropriate, of monitoring equipment at the plant site.

**D. DISCHARGE REPORTING REQUIREMENTS**

**1. Requirements for Reporting of Monitoring**

- a. Monitoring results obtained during the previous three (3) months shall be summarized for each month on a Discharge Monitoring Report (DMR) Form approved by the Department, and submitted to the Department so that it is received by the Director no

later than the 28<sup>th</sup> day of the month following the quarterly reporting period (i.e., on the 28<sup>th</sup> day of January, April, July, and October of each year).

- b. The Department utilizes a web-based electronic environmental (E2) reporting system for submittal of DMRs. Except as allowed by Part I.D.1.c. or d., the Permittee shall submit all DMRs required by Part I.D.1.a. by utilizing the E2 reporting system. The E2 reporting system Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes>.
- c. If the electronic environmental (E2) reporting system is down (i.e. electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's system; this could include entry/submittal issues with an entire set of DMRs or individual parameters), permittees are not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the E2 system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 system resuming operation, the Permittee shall enter the data into the E2 reporting system unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date).
- d. The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver, and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable. Permittees with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The Permittee shall submit the Department-approved DMR forms to the address listed in Part I.D.1.j.
- e. If the Permittee, using approved analytical methods as specified in Part I.C.6., monitors any discharge from a point source identified on Page 1 of this Permit and describe more fully in the Permittee's application more frequently than required by this Permit; the results of such monitoring shall be included in the calculation and reporting of values on the DMR Form, and the increased frequency shall be indicated on the DMR Form.
- f. In the event no discharge from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application occurs during a monitoring period, the Permittee shall report "No Discharge" for such period on the appropriate DMR Form.
- g. The Permittee shall report "No Discharge During Quarterly Monitoring Period" on the appropriate DMR Form for each point source receiving pumped discharges pursuant to Part I.C.1.b. provided that no discharge has occurred at any time during the entire quarterly (three month) monitoring period.
- h. Each DMR Form submitted by the Permittee to the Department in accordance with Part I.D.1. must be legible and bear an original signature or electronic signature. Photo and

electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this Permit.

- i. All reports and forms required to be submitted by this Permit, the AWPCA, and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee as defined in ADEM Admin. Code r. 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Admin. Code r. 335-6-6-.09 and shall bear the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- j. All DMRs, reports, and forms required to be submitted by this Permit, the AWPCA and the Department's rules and regulations, shall be addressed to:

Alabama Department of Environmental Management  
Water Division, Mining and Natural Resource Section  
Post Office Box 301463  
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management  
Water Division, Mining and Natural Resource Section  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2059

- k. Unless authorized in writing by the Department, approved reporting forms required by this Permit or the Department are not to be altered, and if copied or reproduced, must be consistent in format and identical in content to the ADEM approved form. Unauthorized alteration, falsification, or use of incorrectly reproduced forms constitutes noncompliance with the requirements of this Permit and may significantly delay processing of any request, result in denial of the request, result in permit termination, revocation, suspension, modification, or denial of a permit renewal application, or result in other enforcement action.
- l. If this Permit is a reissuance, then the Permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.D.).

## 2. Noncompliance Notification

- a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:
  - (1) Potentially threatens human health or welfare;
  - (2) Potentially threatens fish or aquatic life;

- (3) Causes an in-stream water quality criterion to be exceeded;
- (4) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. §1317(a);
- (5) Contains a quantity of a hazardous substance which has been determined may be harmful to the public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. §1321(b)(4); or
- (6) Exceeds any discharge limitation for an effluent parameter as a result of an unanticipated bypass or upset.

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects of such discharge to the Director within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit to the Director a written report as provided in Part I.D.2.c., no later than five (5) days after becoming aware of the occurrence of such discharge.

- b. If for any reason, the Permittee's discharge does not comply with any limitation of this Permit, the Permittee shall submit a written report to the Director as provided in Part I.D.2.c. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Part I.D.1. of this Permit after becoming aware of the occurrence of such noncompliance.
- c. Any written report required to be submitted to the Director in accordance with Parts I.D.2.a. and b. shall be submitted using a Noncompliance Notification Form (ADEM Form 421) available on the Department's website (<http://adem.alabama.gov/DeptForms/Form421.pdf>) and include the following information:
  - (1) A description of the discharge and cause of noncompliance;
  - (2) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue; and
  - (3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

### **3. Reduction, Suspension, or Termination of Monitoring and/or Reporting**

- a. The Director may, with respect to any point source identified on Page 1 of this Permit and described more fully in the Permittee's application, authorize the Permittee to reduce, suspend, or terminate the monitoring and/or reporting required by this Permit upon the submission of a written request for such reduction, suspension, or termination by the Permittee provided:
  - (1) All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted or controlled to preclude unpermitted and unauthorized mining, processing, transportation, or associated operations/activity;
  - (2) Permanent, perennial vegetation has been re-established on all areas mined or disturbed for at least one year since mining has ceased in the drainage basin(s) associated with the surface discharge, or all areas have been permanently graded

such that all drainage is directed back into the mined pit to preclude all surface discharges;

- (3) Unless waived in writing by the Department, the Permittee has been granted, in writing, a 100% Bond Release, if applicable, by the Alabama Department of Industrial Relations and, if applicable, by the Surface Mining Commission for all areas mined or disturbed in the drainage basin(s) associated with the discharge;
  - (4) Unless waived in writing by the Department, the Permittee has submitted inspection reports prepared and certified by a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction which certify that the facility has been fully reclaimed or that water quality remediation has been achieved. The first inspection must be conducted approximately one year prior to and the second inspection must be conducted within thirty days of the Permittee's request for termination of monitoring and reporting requirements;
  - (5) All surface effects of the mining activity such as fuel or chemical tanks, preparation plants or equipment, old tools or equipment, junk or debris, etc., must be removed and disposed of according to applicable state and federal regulations;
  - (6) The Permittee's request for termination of monitoring and reporting requirements contained in this Permit has been supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying seasonal climatological conditions;
  - (7) The Permittee has stated in its request that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all Permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all Permit terms and conditions respecting analytical methods and procedures;
  - (8) The Permittee has certified that during the entire period covered by the monitoring data submitted, no chemical treatment of the discharge was provided;
  - (9) The Permittee's request has included the certification required by Part I.D.1.e. of this Permit; and
  - (10) The Permittee has certified to the Director in writing as part of the request, its compliance with (1) through (9) above.
- b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this Permit until written authorization to reduce, suspend, or terminate such monitoring and/or reporting is received by the Permittee from the Director.

## **E. OTHER REPORTING AND NOTIFICATION REQUIREMENTS**

### **1. Anticipated Noncompliance**

The Permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

**2. Termination of Discharge**

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified on Page 1 of this Permit and described more fully in the Permittee's application have permanently ceased.

**3. Updating Information**

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or officer(s) having the authority and responsibility to prevent and abate violations of the AWPCA, the AEMA, the Department's rules and regulations, and the terms and conditions of this Permit, in writing, no later than ten (10) days after such change. Upon request of the Director, the Permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

**4. Duty to Provide Information**

- a. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, terminating, or revoking and reissuing this Permit, in whole or in part, or to determine compliance with this Permit. The Permittee shall also furnish to the Director upon request, copies of records required to be maintained by this Permit.
- b. The Permittee shall furnish to the Director upon request, within a reasonable time, available information (name, phone number, address, and site location) which identifies offsite sources of material or natural resources (mineral, ore, or other material such as iron, coal, coke, dirt, chert, shale, clay, sand, gravel, bauxite, rock, stone, etc.) used in its operation or stored at the facility.

**F. SCHEDULE OF COMPLIANCE**

The Permittee shall achieve compliance with the discharge limitations specified in Part I.A. of this Permit in accordance with the following schedule:

**Compliance must be achieved by the effective date of this Permit.**

## **PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES**

### **A. OPERATIONAL AND MANAGEMENT REQUIREMENTS**

#### **1. Facilities Operation and Management**

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of this Permit.

#### **2. Pollution Abatement and/or Prevention Plan**

The Pollution Abatement and/or Prevention (PAP) Plan shall be prepared and certified by a registered Professional Engineer (PE), licensed to practice in the State of Alabama, and shall include at a minimum, the information indicated in ADEM Admin. Code r. 335-6-9-.03 and ADEM Admin. Code ch. 335-6-9 Appendices A and B. The PAP Plan shall become a part of this Permit and all requirements of the PAP Plan shall become requirements of this Permit pursuant to ADEM Admin. Code r. 335-6-9-.05(2).

#### **3. Best Management Practices (BMPs)**

- a. Unless otherwise authorized in writing by the Director, the Permittee shall provide a means of subsurface withdrawal for any discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application. Notwithstanding the above provision, a means of subsurface withdrawal need not be provided for any discharge caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event.
- b. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director has granted prior written authorization for dilution to meet water quality requirements.
- c. The Permittee shall minimize the contact of water with overburden, including but not limited to stabilizing disturbed areas through grading, diverting runoff, achieving quick growing stands of temporary vegetation, sealing acid-forming and toxic-forming materials, and maximizing placement of waste materials in back-fill areas.
- d. The Permittee shall prepare, submit to the Department for approval, and implement a Best Management Practices (BMPs) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a potential for discharge, if so required by the Director. When submitted and approved, the BMP Plan shall become a part of this Permit and all requirements of the BMP Plan shall become requirements of this Permit.
- e. Spill Prevention, Control, and Management

The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan acceptable to the Department that is prepared and certified by a Professional Engineer (PE), registered in the State of Alabama, for all onsite petroleum product or other pollutant storage tanks or containers as required by applicable state (ADEM Admin. Code r. 335-6-6-.12 (r)) and federal (40 C.F.R. §§112.1-.7)

regulations. The Permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a ground or surface water of the State or a publicly or privately owned treatment works. Careful consideration should be applied for tanks or containers located near treatment ponds, water bodies, or high traffic areas. In most situations this would require construction of a containment system if the cumulative storage capacity of petroleum products or other pollutants at the facility is greater than 1320 gallons. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and shall prevent the contamination of groundwater. Such containment systems shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The applicant shall maintain onsite or have readily available flotation booms to contain, and sufficient material to absorb, fuel and chemical spills and leaks. Soil contaminated by chemical spills, oil spills, etc., must be immediately cleaned up or be removed and disposed of in an approved manner.

- f. All surface drainage and storm water runoff which originate within or enters the Permittee's premises and which contains any pollutants or other wastes shall be discharged, if at all, from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application.
- g. The Permittee shall take all reasonable precautions to prevent any surface drainage or storm water runoff which originates outside the Permittee's premises and which contains any pollutants or other wastes from entering the Permittee's premises. At no time shall the Permittee discharge any such surface drainage or storm water runoff which enters the Permittee's premises if, either alone or in combination with the Permittee's effluent, the discharge would exceed any applicable discharge limitation specified in Part I.A. of this Permit.

**4. Biocide Additives**

- a. The Permittee shall notify the Director in writing not later than sixty (60) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in any cooling or boiler system(s) regulated by this Permit. Notification is not required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the Permittee. Such notification shall include:
  - (1) Name and general composition of biocide or chemical;
  - (2) 96-hour median tolerance limit data for organisms representative of the biota of the water(s) which the discharge(s) enter(s);
  - (3) Quantities to be used;
  - (4) Frequencies of use;
  - (5) Proposed discharge concentrations; and
  - (6) EPA registration number, if applicable.
- b. The use of any biocide or chemical additive containing tributyl tin, tributyl tin oxide, zinc, chromium, or related compounds in any cooling or boiler system(s) regulated by the Permit is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates

during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this Permit or in the application for this Permit or not exempted from notification under this Permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

**5. Facility Identification**

The Permittee shall clearly display prior to commencement of any regulated activity and until permit coverage is properly terminated, the name of the Permittee, entire NPDES permit number, facility or site name, and other descriptive information deemed appropriate by the Permittee at an easily accessible location(s) to adequately identify the site, unless approved otherwise in writing by the Department. The Permittee shall repair or replace the sign(s) as necessary upon becoming aware that the identification is missing or is unreadable due to age, vandalism, theft, weather, or other reason.

**6. Removed Substances**

Solids, sludges, filter backwash, or any other pollutants or other wastes removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department rules and regulations.

**7. Loss or Failure of Treatment Facilities**

Upon the loss or failure of any treatment facility, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Part I.A. of this Permit or any other terms or conditions of this Permit, cease, reduce, or otherwise control production and/or discharges until treatment is restored.

**8. Duty to Mitigate**

The Permittee shall promptly take all reasonable steps to minimize or prevent any violation of this Permit or to mitigate and minimize any adverse impact to waters resulting from noncompliance with any discharge limitation specified in Part I.A. of this Permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as is necessary to determine the nature and impact of the noncomplying discharge.

**B. BYPASS AND UPSET**

**1. Bypass**

a. Any bypass is prohibited except as provided in Parts II.B.1.b. and c.

b. A bypass is not prohibited if:

- (1) It does not cause any applicable discharge limitation specified in Part I.A. of this Permit to be exceeded;
- (2) The discharge resulting from such bypass enters the same receiving water as the discharge from the permitted outfall;

- (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system; and
    - (4) The Permittee monitors the discharge resulting from such bypass at a frequency, at least daily, sufficient to prove compliance with the discharge limitations specified in Part I.A. of this Permit.
  - c. A bypass is not prohibited and need not meet the discharge limitations specified in Part I.A. of this Permit if:
    - (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the Permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days, if possible, prior to the anticipated bypass or within 24 hours of an unanticipated bypass, the Permittee is granted such authorization, and Permittee complies with any conditions imposed by the Director to minimize any adverse impact to waters resulting from the bypass.
  - d. The Permittee has the burden of establishing that each of the conditions of Parts II.B.1.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in Part II.B.1.a. and an exemption, where applicable, from the discharge limitations specified in Part I.A. of this Permit.

2. Upset

- a. Except as provided in Parts II.B.2.b. and c., a discharge which results from an upset need not meet the applicable discharge limitations specified in Part I.A. of this Permit if:
  - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director; and
  - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, design drawings, construction certification, maintenance records, weir flow measurements, dated photographs, rain gauge measurements, or other relevant evidence, demonstrating that:
    - (i) An upset occurred;
    - (ii) The Permittee can identify the specific cause(s) of the upset;
    - (iii) The Permittee's treatment facility was being properly operated at the time of the upset; and
    - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact to waters resulting from the upset.

- b. Notwithstanding the provisions of Part II.B.2.a., a discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which results from a 24-hour precipitation event larger than a 10-year, 24-hour precipitation event is not exempted from the discharge limitations specified in Part I.A. of this Permit unless:
  - (1) The treatment facility or system is designed, constructed, and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or to treat the maximum flow associated with these volumes.

In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the volume which would result from all areas contributing runoff to the individual treatment facility must be included (i.e., all runoff that is not diverted from the mining area and runoff which is not diverted from the preparation plant area); and
  - (2) The Permittee takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow or excess discharge.
- c. The Permittee has the burden of establishing that each of the conditions of Parts II.B.2.a. and b. have been met to qualify for an exemption from the discharge limitations specified in Part I.A. of this Permit.

## C. PERMIT CONDITIONS AND RESTRICTIONS

### 1. Prohibition against Discharge from Facilities Not Certified

- a. Notwithstanding any other provisions of this Permit, if the permitted facility has not obtained or is not required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which was not certified to the Department on a form approved by the Department by a professional engineer, registered in the State of Alabama, as being designed, constructed, and in accordance with plans and specifications reviewed by the Department is prohibited; or
- b. Notwithstanding any other provisions of this Permit, if the permitted facility has obtained or is required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which is associated with a treatment facility which was not constructed and certified to the Alabama Surface Mining Commission pursuant to applicable provisions of said Commission's regulations, is prohibited until the Permittee submits to the Alabama Surface Mining Commission, certification by a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the Alabama Surface Mining Commission. This requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the Alabama Surface Mining Commission, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.

**2. Permit Modification, Suspension, Termination, and Revocation**

- a. This Permit may be modified, suspended, terminated, or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
- (1) The violation of any term or condition of this Permit;
  - (2) The obtaining of this Permit by misrepresentation or the failure to disclose fully all relevant facts;
  - (3) The submission of materially false or inaccurate statements or information in the permit application or reports required by the Permit;
  - (4) The need for a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
  - (5) The existence of any typographical or clerical errors or of any errors in the calculation of discharge limitations;
  - (6) The existence of material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
  - (7) The threat of the Permittee's discharge on human health or welfare; or
  - (8) Any other cause allowed by ADEM Admin. Code ch. 335-6-6.
- b. The filing of a request by the Permittee for modification, suspension, termination, or revocation and reissuance of this Permit, in whole or in part, does not stay any Permit term or condition of this Permit.

**3. Automatic Expiration of Permits for New or Increased Discharges**

- a. Except as provided by ADEM Admin. Code r. 335-6-6-.02(h) and 335-6-6-.05, if this Permit was issued for a new discharger or new source, it shall expire eighteen months after the issuance date if construction has not begun during that eighteen month period.
- b. Except as provided by ADEM Admin. Code r. 335-6-6-.02(h) and 335-6-6-.05, if any portion of this Permit was issued or modified to authorize the discharge of increased quantities of pollutants to accommodate the modification of an existing facility, that portion of this Permit shall expire eighteen months after this Permit's issuance if construction of the modification has not begun within eighteen month period.
- c. Construction has begun when the owner or operator has:
- (1) Begun, or caused to begin as part of a continuous on-site construction program:
    - (i) Any placement, assembly, or installation of facilities or equipment; or
    - (ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

- (2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.
  - d. The automatic expiration of this Permit for new or increased discharges if construction has not begun within the eighteen month period after the issuance of this Permit may be tolled by administrative or judicial stay.
4. **Transfer of Permit**

This Permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of this Permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership, or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership, or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership, or control, he may decide not to modify the existing Permit and require the submission of a new permit application.
5. **Groundwater**

Unless authorized on page I of this Permit, this Permit does not authorize any discharge to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.
6. **Property and Other Rights**

This Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State or of the United States.

## **D. RESPONSIBILITIES**

1. **Duty to Comply**
  - a. The Permittee must comply with all terms and conditions of this Permit. Any permit noncompliance constitutes a violation of the AWPCA, AEMA, and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
  - b. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the FWPCA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the effluent standard, prohibition or requirement.

- c. For any violation(s) of this Permit, the Permittee is subject to a civil penalty as authorized by the AWPCA, the AEMA, the FWPCA, and Code of Alabama 1975, §§22-22A-1 et. seq., as amended, and/or a criminal penalty as authorized by Code of Alabama 1975, §22-22-1 et. seq., as amended.
- d. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of this Permit shall not be a defense for a Permittee in an enforcement action.
- e. Nothing in this Permit shall be construed to preclude or negate the Permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, federal, state, or local government permits, certifications, licenses, or other approvals.
- f. The discharge of a pollutant from a source not specifically identified in the permit application for this Permit and not specifically included in the description of an outfall in this Permit is not authorized and shall constitute noncompliance with this Permit.
- g. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this Permit or to minimize or prevent any adverse impact of any permit violation.

**2. Change in Discharge**

- a. The Permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants, increase the quantity of a discharged pollutant, or that could result in an additional discharge point. This requirement also applies to pollutants that are not subject to discharge limitations in this Permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.
- b. The Permittee shall notify the Director as soon as it knows or has reason to believe that it has begun or expects to begin to discharge any pollutant listed as a toxic pollutant pursuant to Section 307(a) of the FWPCA, 33 U.S.C. §1317(a), any substance designated as a hazardous substance pursuant to Section 311(b)(2) of the FWPCA, 33 U.S.C. §1321(b)(2), any waste listed as a hazardous waste pursuant to Code of Alabama 1975, §22-30-10, or any other pollutants or other wastes which is not subject to any discharge limitations specified in Part I.A. of this Permit and was not reported in the Permittee's application, was reported in the Permittee's application in concentrations or mass rates lower than that which the Permittee expects to begin to be discharged, or has reason to believe has begun to be discharged.

**3. Compliance with Toxic or Other Pollutant Effluent Standard or Prohibition**

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Sections 301(b)(2)(C),(D),(E) and (F) of the FWPCA, 33 U.S.C. §1311(b)(2)(C),(D),(E), and (F); 304(b)(2) of the FWPCA, 33 U.S.C. §1314(b)(2); or 307(a) of the FWPCA, 33 U.S.C. §1317(a), for a toxic or other pollutant discharged by the Permittee, and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Part I.A. of this Permit or controls a pollutant not limited in Part I.A. of this Permit, this Permit shall be modified to conform to the toxic or other pollutant effluent standard or prohibition and the Permittee shall be notified of such modification. If this Permit has not been modified to conform to the toxic or other pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the authorization to discharge in this Permit shall be void to the extent that any discharge limitation on such pollutant in Part I.A.

of this Permit exceeds or is inconsistent with the established toxic or other pollutant effluent standard or prohibition.

**4. Compliance with Water Quality Standards and Other Provisions**

- a. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this Permit will assure compliance with applicable water quality standards. However, this Permit does not relieve the Permittee from compliance with applicable State water quality standards established in ADEM Admin. Code ch. 335-6-10, and does not preclude the Department from taking action as appropriate to address the potential for contravention of applicable State water quality standards which could result from discharges of pollutants from the permitted facility.
- b. Compliance with Permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point source(s) identified on Page I of this Permit cause(s) or contribute(s) to a condition in contravention of State water quality standards, the Department may require abatement action to be taken by the Permittee, modify the Permit pursuant to the Department's rules and regulations, or both.
- c. If the Department determines, on the basis of a notice provided pursuant to Part II.C.2. of this Permit or any investigation, inspection, or sampling, that a modification of this Permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the noticed act until the Permit has been modified.

**5. Compliance with Statutes and Rules**

- a. This Permit has been issued under ADEM Admin. Code div. 335-6. All provisions of this division, that are applicable to this Permit, are hereby made a part of this Permit. A copy of this division may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Blvd., Montgomery, AL 36110-2059.
- b. This Permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

**6. Right of Entry and Inspection**

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the Permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

**7. Duty to Reapply or Notify of Intent to Cease Discharge**

- a. If the Permittee intends to continue to discharge beyond the expiration date of this Permit, the Permittee shall file with the Department a complete permit application for reissuance of this Permit at least 180 days prior to its expiration.
- b. If the Permittee does not desire to continue the discharge(s) allowed by this Permit, the Permittee shall notify the Department at least 180 days prior to expiration of this Permit of the Permittee's intention not to request reissuance of this Permit. This notification must include the information required in Part I.D.4.a. and be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Admin. Code r. 335-6-6-.09.
- c. Failure of the Permittee to submit to the Department a complete application for reissuance of this Permit at least 180 days prior to the expiration date of this Permit will void the automatic continuation of this Permit provided by ADEM Admin. Code r. 335-6-6-.06; and should this Permit not be reissued for any reason, any discharge after the expiration of this Permit will be an unpermitted discharge.

## **PART III     ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS**

### **A.     CIVIL AND CRIMINAL LIABILITY**

#### **1.     Tampering**

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this Permit shall, upon conviction, be subject to penalties and/or imprisonment as provided by the AWPCA and/or the AEMA.

#### **2.     False Statements**

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished as provided by applicable State and Federal law.

#### **3.     Permit Enforcement**

This NPDES Permit is a Permit for the purpose of the AWPCA, the AEMA, and the FWPCA, and as such all terms, conditions, or limitations of this Permit are enforceable under State and Federal law.

#### **4.     Relief From Liability**

Except as provided in Part II.B.1. (Bypass) and Part II.B.2. (Upset), nothing in this Permit shall be construed to relieve the Permittee of civil or criminal liability under the AWPCA, AEMA, or FWPCA for noncompliance with any term or condition of this Permit.

### **B.     OIL AND HAZARDOUS SUBSTANCE LIABILITY**

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under Section 311 of the FWPCA, 33 U.S.C. §1321.

### **C.     AVAILABILITY OF REPORTS**

Except for data determined to be confidential under Code of Alabama 1975, §22-22-9(c), all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement in any such report may result in the imposition of criminal penalties as provided for in Section 309 of the FWPCA, 33 U.S.C. §1319, and Code of Alabama 1975, §22-22-14.

### **D.     DEFINITIONS**

1.     Alabama Environmental Management Act (AEMA) - means Code of Alabama 1975, §§22-22A-1 et. seq., as amended.
2.     Alabama Water Pollution Control Act (AWPCA) - means Code of Alabama 1975, §§22-22-1 et. seq., as amended.
3.     Average monthly discharge limitation - means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar

month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

4. Arithmetic Mean - means the summation of the individual values of any set of values divided by the number of individual values.
5. BOD - means the five-day measure of the pollutant parameter biochemical oxygen demand
6. Bypass - means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD - means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Controlled Surface Mine Drainage – means any surface mine drainage that is pumped or siphoned from the active mining area.
9. Crushed stone mine - means an area on or beneath land which is mined, quarried, or otherwise disturbed in activity related to the extraction, removal, or recovery of stone from natural or artificial deposits, including active mining, reclamation, and mineral storage areas, for production of crushed stone.
10. Daily discharge - means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
11. Daily maximum - means the highest value of any individual sample result obtained during a day.
12. Daily minimum - means the lowest value of any individual sample result obtained during a day.
13. Day - means any consecutive 24-hour period.
14. Department - means the Alabama Department of Environmental Management.
15. Director - means the Director of the Department or his authorized representative or designee.
16. Discharge - means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state." Code of Alabama 1975, §22-22-1(b)(8)
17. Discharge monitoring report (DMR) - means the form approved by the Director to accomplish monitoring report requirements of an NPDES Permit.
18. DO - means dissolved oxygen.
19. E. coli – means the pollutant parameter Escherichia coli.
20. 8HC - means 8-hour composite sample, including any of the following:
  - a. The mixing of at least 5 equal volume samples collected at constant time intervals of not more than 2 hours over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.

- b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
- 21. EPA - means the United States Environmental Protection Agency.
- 22. Federal Water Pollution Control Act (FWPCA) - means 33 U.S.C. §§1251 et. seq., as amended.
- 23. Flow – means the total volume of discharge in a 24-hour period.
- 24. Geometric Mean - means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
- 25. Grab Sample - means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
- 26. Indirect Discharger - means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
- 27. Industrial User - means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
- 28. mg/L - means milligrams per liter of discharge.
- 29. MGD - means million gallons per day.
- 30. Monthly Average - means, other than for E. coli bacteria, the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for E. coli bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period. (Zero discharges shall not be included in the calculation of monthly averages.)
- 31. New Discharger - means a person owning or operating any building, structure, facility or installation:
  - a. From which there is or may be a discharge of pollutants;
  - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and
  - c. Which has never received a final effective NPDES Permit for dischargers at that site.
- 32. New Source - means:
  - a. A new source as defined for coal mines by 40 CFR Part 434.11 (1994); and
  - b. Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - (1) After promulgation of standards of performance under Section 306 of FWPCA which are applicable to such source; or

- (2) After proposal of standards of performance in accordance with Section 306 of the FWPCA which are applicable to such source, but only if the standards are promulgated in accordance with Section 206 within 120 days of their proposal.
33. NH<sub>3</sub>-N - means the pollutant parameter ammonia, measured as nitrogen.
34. 1-year, 24-hour precipitation event - means the maximum 24-hour precipitation event with a probable recurrence interval of once in one year as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
35. Permit application - means forms and additional information that are required by ADEM Admin. Code r. 335-6-6-.08 and applicable permit fees.
36. Point Source - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. §1362(14).
37. Pollutant - includes for purposes of this Permit, but is not limited to, those pollutants specified in Code of Alabama 1975, §22-22-1(b)(3) and those effluent characteristics, excluding flow, specified in Part I.A. of this Permit.
38. Pollutant of Concern - means those pollutants for which a water body is listed as impaired or which contribute to the listed impairment.
39. Pollution Abatement and/or Prevention Plan (PAP Plan) - mining operations plan developed to minimize impacts on water quality to avoid a contravention of the applicable water quality standards as defined in ADEM Admin. Code r. 335-6-9-.03
40. Preparation, Dry - means a dry preparation facility within which the mineral/material is cleaned, separated, or otherwise processed without use of water or chemical additives before it is shipped to the customer or otherwise utilized. A dry preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Dry preparation also includes minor water spray(s) used solely for dust suppression on equipment and roads to minimize dust emissions.
41. Preparation, Wet - means a wet preparation facility within which the mineral/material is cleaned, separated, or otherwise processed using water or chemical additives before it is shipped to the customer or otherwise utilized. A wet preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Wet preparation also includes mineral extraction/processing by dredging, slurry pumping, etc.
42. Privately Owned Treatment Works - means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
43. Publicly Owned Treatment Works (POTW) - means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
44. Receiving Stream - means the "waters" receiving a "discharge" from a "point source".

45. Severe property damage - means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
46. 10-year, 24-hour precipitation event - means that amount of precipitation which occurs during the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
47. TKN - means the pollutant parameter Total Kjeldahl Nitrogen.
48. TON - means the pollutant parameter Total Organic Nitrogen.
49. TRC - means Total Residual Chlorine.
50. TSS - means the pollutant parameter Total Suspended Solids
51. Treatment facility and treatment system - means all structures which contain, convey, and as necessary, chemically or physically treat mine and/or associated preparation plant drainage, which remove pollutants limited by this Permit from such drainage or wastewater. This includes all pipes, channels, ponds, tanks, and all other equipment serving such structures.
52. 24HC - means 24-hour composite sample, including any of the following:
  - a. The mixing of at least 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
  - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
  - c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
53. 24-hour precipitation event - means that amount of precipitation which occurs within any 24-hour period.
54. 2-year, 24-hour precipitation event - means the maximum 24-hour precipitation event with a probable recurrence interval of once in two years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
55. Upset - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate facilities, lack of preventive maintenance, or careless or improper operation.
56. Waters - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, §22-22-1(b)(2). "Waters" include all "navigable waters" as defined in §502(7) of the FWPCA, 33 U.S.C. §1362(7), which are within the State of Alabama.

57. Week - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
58. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

#### **E. SEVERABILITY**

The provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

#### **F. PROHIBITIONS AND ACTIVITIES NOT AUTHORIZED**

1. Discharges from disposal or landfill activities as described in ADEM Admin. Code div. 335-13 are not authorized by this Permit unless specifically approved by the Department.
2. Relocation, diversion, or other alteration of a water of the State is not authorized by this Permit unless specifically approved by the Department.
3. Lime or cement manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.
4. Concrete or asphalt manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.
5. The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the Permittee or not identified in the application for this Permit or not identified specifically in the description of an outfall in this Permit is not authorized by this Permit.

## **PART IV SPECIAL REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS**

### **A. DISCHARGES TO IMPAIRED WATERS**

1. This Permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent with an EPA-approved or EPA-established Total Maximum Daily Load (TMDL) and applicable State law, or unless compliance with the limitations and requirements of the Permit ensure that the discharge will not contribute to further degradation of the receiving stream. Impaired waters are those that do not meet applicable water quality standards and are identified on the State of Alabama's §303(d) list or on an EPA-approved or EPA-established TMDL. Pollutants of concern are those pollutants for which the receiving water is listed as impaired or contribute to the listed impairment.
2. Facilities that discharge into a receiving stream which is listed on the State of Alabama's §303(d) list of impaired waters, and with discharges that contain the pollutant(s) for which the waters are impaired, must within six (6) months of the Final §303(d) list approval, document in its BMP plan how the BMPs will control the discharge of the pollutant(s) of concern, and must ensure that there will be no increase of the pollutants of concern. A monitoring plan to assess the effectiveness of the BMPs in achieving the allocations must also be included in the BMP plan.
3. If the facility discharges to impaired waters as described above, it must determine whether a TMDL has been developed and approved or established by EPA for the listed waters. If a TMDL is approved or established during this Permit cycle by EPA for any waters into which the facility discharges, the facility must review the applicable TMDL to see if it includes requirements for control of any water discharged by the Permittee. Within six (6) months of the date of TMDL approval or establishment, the facility must notify the Department on how it will modify its BMP plan to include best management practices specifically targeted to achieve the allocations prescribed by the TMDL, if necessary. Any revised BMP plans must be submitted to the Department for review. The facility must include in the BMP plan a monitoring component to assess the effectiveness of the BMPs in achieving the allocations.

### **B. MANGANESE EXEMPTION DISCHARGE LIMITATIONS**

Limitations and monitoring requirements for total manganese do not apply if the drainage, before any treatment, has a pH equal to or more than 6.0 s.u. and a total iron concentration of less than 10.0 mg/l. Use of this exemption must be noted on the Discharge Monitoring Report (DMR) form when submitted for each eligible outfall. Documentation of alkaline mine drainage before treatment must also be submitted at the time of the associated DMR submittal.

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION**

**NPDES INDIVIDUAL PERMIT RATIONALE**

**Company Name:** Cordova Clay Co., Inc.  
**Facility Name:** Riceton Hill Mine  
**County:** Walker  
**Permit Number:** AL0047198  
**Prepared by:** David Hearn  
**Date:** February 23, 2018  
**Receiving Waters:** Unnamed Tributary to Mulberry Creek  
**Permit Coverage:** Shale and Common Clay Mine, Incidental Coal Mining, Dry Preparation, Transportation and Storage, and Associate Areas  
**SIC Code:** 1459 and 1221

The Department has made a tentative determination that the available information is adequate to support reissuance of this permit.

This proposed permit covers a shale and common clay mine, incidental coal mining, dry preparation, transportation and storage, and associated areas. The permittee has applied for an exemption with the Alabama Surface Mining Commission (ASMC) to allow the mining of coal without an ASMC permit coverage. This Exemption (E-0055) allows for the mining provided that the total tonnage of coal removed is less than 16 ⅔ percent of the total tonnage mined and that less than 50 percent of the total revenue comes from the sale of coal.

This proposed permit authorizes treated discharges into stream segments, other State waters, or local watersheds that currently have a water quality use classification of Fish & Wildlife (F&W) (ADEM Admin. Code ch. 335-6-11). However, the downstream water (Mulberry Fork) is classified as Public Water Supply (PWS) and Fish & Wildlife (F&W). Therefore, the permit has been drafted assuming direct discharge to a PWS. If the requirements of the proposed permit are fully implemented, the facility will not discharge pollutants at levels that will cause or contribute to a violation of the PWS or F&W classifications.

Full compliance with the proposed permit terms and conditions is expected to be protective of instream water quality and ensure consistency with applicable instream State water quality standards (WQS) for the receiving streams.

The proposed permit covers the discharges from a single outfall receiving drainage from shale, common clay, and coal mining activities. Therefore, the permit was prepared wholly using Best Professional Judgment (BPJ) with consideration given to 40 CFR Part 434, 40 CFR Part 436, and EPA's *Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Mineral Mining and Processing Point Source Category* (July 1979).

40 CFR 436 Subpart AD is reserved for shale and common clay mineral mining and processing, however, Technology Based Effluent Limits (TBELs) have not yet been promulgated. Therefore, limitations for Total Iron as Fe and Manganese as Mn are based on 40 CFR Part 434. Daily maximum effluent limitations for TSS are those proposed by EPA for dry process shale and common clay mine drainage in the *Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Mineral Mining and Processing Point Source Category* (July 1979).

The Permittee may submit documentation that discharges from the site are alkaline mine drainage (*i.e.*, the drainage prior to treatment has a pH equal to or more than 6.0 s.u. and a Total Fe concentration of less than 10.0 mg/L). Part IV.B. of the proposed permit provides that limitations and monitoring requirements for Total Manganese as Mn do not apply if the Permittee has provided the documentation of alkaline mine drainage. In such a case, the active mining discharge limitations for the daily maximum and minimum of pH and Total Iron as Fe are based on the NSPS ELGs found in 40 CFR Part 434.45 for alkaline mine drainage.

The instream water quality standards for pH in streams classified as PWS and F&W are 6.0 – 8.5 s.u. per ADEM Admin. Code r. 335-6-10-.09. However, due to the fact that discharges are expected only in response to rain events, it is the opinion of the Department that discharges with an allowable pH daily maximum of 9.0 s.u. will not adversely affect the instream pH based on the low discharge/stream flow ratio.

Additional effluent monitoring for Specific Conductance, Sulfate as S, and Total Dissolved Solids (TDS) is required so that future determinations can be made as to whether or not a reasonable potential to cause or contribute to an excursion of numeric or narrative WQS exists from this and similar discharges.

The applicant has, in accordance with 40 CFR Part 122.21 and their NPDES permit application, submitted representative effluent and background stream data for metals, cyanide, and total phenols as part of the application. The Department has acknowledged that the other Part A, B, and C pollutants listed in EPA Form 2C and 2D are not believed to be present in the waste stream due to the processes involved in the mining activity. Therefore, testing for the other Part A, B, and C pollutants listed in EPA Form 2C and 2D is not required. The Department has reviewed available data in ALAWADR, ADEM's water quality database, and found nothing to contradict the data submitted by the applicant.

The Department completed a reasonable potential analysis (RPA) of the discharges based on the laboratory data provided in the application. The RPA indicates whether or not pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream WQS. Based on the analytical data, it appears that reasonable potential may exist to cause an in-stream water quality criteria exceedance for Selenium (Se). As a result, the Department is imposing discharge limitations for Total Recoverable Selenium for Outfall 004-1.

Pursuant to ADEM Admin. Code r. 335-6-6-.12(r) this permit requires the Permittee to design and implement a Spill Prevention Control and Countermeasures (SPCC) plan for all stored chemicals, fuels and/or stored pollutants that have the potential to discharge to a water of the State. This plan must meet the minimum engineering requirements as defined in 40 CFR Part 112 and must provide for secondary containment adequate to control a potential spill.

In accordance with ADEM Admin. Code r. 335-6-3-.07 the design professional engineer (PE), as evidenced by their seal and/or signature on the application, has accepted full responsibility for the effectiveness of the waste treatment facility to treat the Permittee's effluent to meet NPDES permit limitations and requirements, and to fully comply with Alabama's WQS, when such treatment facilities are properly operated.

The Pollution Abatement/Prevention (PAP) plan for this facility has been prepared by a PE registered in the State of Alabama and is designed to ensure reduction of pollutants in the waste stream to a level that, if operated properly, the discharge will not contribute to or cause a violation of applicable State WQS. The proposed permit terms and conditions are predicated on the basis of ensuring a reduction of pollutants in the discharge to a level that reduces the potential of contributing to or causing a violation of applicable State WQS.

If there is a reasonable potential that a pollutant present in the treated discharges from a facility could cause or contribute to a contravention of applicable State WQS above numeric or narrative criteria, 40 CFR § 122 requires the Department to establish effluent limits using calculated water quality criterion, establish effluent limits on a case-by-case basis using criteria established by EPA, or establish effluent limits based on an indicator parameter. Based on available information, potential pollutants discharged from this facility, if discharged within the concentrations allowed by this permit, would not have a reasonable potential to cause or contribute to a contravention of applicable State WQS.

The applicant is not proposing discharges into a stream segment or other State water that is included on Alabama's current CWA §303(d) list.

The applicant is not proposing discharges of pollutant(s) to a water of the State with an approved Total Maximum Daily Load (TMDL).

The applicant is not proposing discharges of pollutant(s) to an ADEM identified Tier I water.

The proposed permit does not authorize new or increased discharges of pollutants to a Tier II water; therefore, the Antidegradation Policy, ADEM Admin Code 335-6-10.04 does not apply.

Facility Name: Cordova Clay Co., Inc. - Roston Hill Mine																											
NPDES No: AL0047199				Outfall 004-1 <sup>1,2</sup>																							
Freshwater PWS characteristics				Freshwater Anion (ppb) Cl <sup>-</sup> + SO <sub>4</sub> <sup>2-</sup>								Freshwater Cation (ppb) Ca <sup>2+</sup> + Mg <sup>2+</sup>								Carbonate Ca <sup>2+</sup> + Actual Anion Max Carbonate Ca <sup>2+</sup> + 7Q10				Carbonate Ca <sup>2+</sup> + Actual Anion Max Carbonate Ca <sup>2+</sup> + 7Q10			
ID	Parameter	Age	Conc. (ppb)	Background Increase (Ca) Daily Max	Site Daily Discharge as reported to Applicant <sup>3</sup> (Ca)	Water Quality Criteria (C)	Drift Point Limit (Ca)	25% of Drift Point Limit	Pass	Background Increase (Ca) Monthly Ave	Site Daily Discharge as reported to Applicant <sup>3</sup> (Ca)	Water Quality Criteria (C)	Drift Point Limit (Ca)	25% of Drift Point Limit	Pass	Water Quality Criteria (Ca)	Drift Point Limit (Ca)	25% of Drift Point Limit	Pass	Water Quality Criteria (Ca)	Drift Point Limit (Ca)	25% of Drift Point Limit	Pass				
1	Acidity		YES	0	0	-	-	-	-	0	0	-	-	-	-	-	5.52E+00	5.52E+00	1.38E+00	No	1.73E+00	1.73E+00	1.42E+00	No			
2	Ammonia		YES	0	0	100.00	500.00	125.00	No	0	0	200.00	200.00	50.00	No	2.10E+01	2.10E+01	5.25E+00	No	6.28E+01	6.28E+01	1.57E+00	No				
3	Barium		YES	0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-			
4	Boron		YES	0	0	4.00	4.00	1.00	No	0	0	0.04	0.04	0.01	No	-	-	-	-	-	-	-	-	-			
5	Chloride (Chloride Cl <sup>-</sup> )		YES	0	0	1500.00	1500.00	375.00	No	0	0	200.00	200.00	50.00	No	-	-	-	-	-	-	-	-	-			
6	Chloride (Chloride Cl <sup>-</sup> )		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	-	-	-	-	-	-	-	-	-			
7	Copper		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	5.00E+00	5.00E+00	1.25E+00	No	1.25E+00	1.25E+00	3.12E+00	No				
8	Lead		YES	0	0	50.00	50.00	12.50	No	0	0	2.00	2.00	0.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
9	Nitrate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
10	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
11	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
12	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
13	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
14	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
15	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
16	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				
17	Sulfate		YES	0	0	10.00	10.00	2.50	No	0	0	10.00	10.00	2.50	No	1.00E+01	1.00E+01	2.50E+00	No	1.40E+01	1.40E+01	3.50E+00	No				

<sup>1</sup>Outfall 004-1 discharges to an unnamed tributary to Mulberry Fork. The 7Q10 for this receiving stream is 0 cfs. This is the receiving stream flow value used in the calculations.

<sup>2</sup>Outfall 004-1 is reported to have a discharge flow rate of 0.02 MGD. This is the discharge flow rate used in the calculations.

<sup>3</sup>A hardness of 50 mg/L was used in the calculations based data submitted by the Permittee.

<sup>4</sup>Discharge data for all parameters are the results of samples obtained from Outfall 004-1 at Cordova Clay Co., Inc. - Roston Hill Mine on February 10, 2017.

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)  
NPDES INDIVIDUAL PERMIT APPLICATION**

127009  
P 246974.  
F 9867.2

**SURFACE & UNDERGROUND MINERAL & ORE OR MINERAL PRODUCT MINING, QUARRYING, EXCAVATION,  
BORROWING, HYDRAULIC MINING, STORAGE, PROCESSING, PREPARATION, RECOVERY, HANDLING,  
LOADING, STORING, OR DISPOSING ACTIVITIES AND ASSOCIATED AREAS INCLUDING PRE-MINING SITE  
DEVELOPMENT, CONSTRUCTION, EXCAVATION, CLEARING, DISTURBANCE, RECLAMATION, AND  
ASSOCIATED AREAS**

R# 16-36705 H. Nguyen \$5820.00

INSTRUCTIONS: PLEASE READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS FORM. COMPLETE ALL QUESTIONS. RESPOND WITH "N/A" AS APPROPRIATE. INCOMPLETE OR INCORRECT ANSWERS OR MISSING SIGNATURES WILL DELAY PROCESSING. ATTACH ADDITIONAL COMMENTS OR INFORMATION AS NEEDED. IF SPACE IS INSUFFICIENT, CONTINUE ON AN ATTACHED SHEET(S) AS NECESSARY. COMMENCEMENT OF ACTIVITIES APPLIED FOR AS DETAILED IN THIS APPLICATION ARE NOT AUTHORIZED UNTIL PERMIT COVERAGE HAS BEEN ISSUED BY THE DEPARTMENT.

PLEASE TYPE OR PRINT IN INK ONLY.

**PURPOSE OF THIS APPLICATION**

- |   |  |
|---|--|
| <input type="checkbox"/> Initial Permit Application for New Facility  | <input type="checkbox"/> Initial Permit Application for Existing Facility (e.g. facility previously permitted less than 5 acres) |
| <input type="checkbox"/> Modification of Existing Permit              | <input checked="" type="checkbox"/> Reissuance of Existing Permit  |
| <input type="checkbox"/> Reissuance & Transfer of Existing Permit     | <input type="checkbox"/> Reissuance & Modification Existing Permit   |
| <input type="checkbox"/> Revocation and Reissuance of Existing Permit | <input type="checkbox"/> Other _____   |

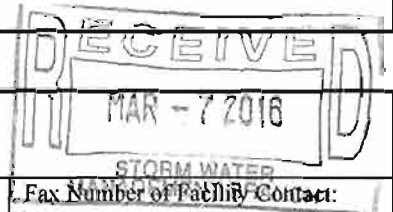
**I. GENERAL INFORMATION**

NPDES Permit Number (Not applicable if initial permit application): <b>AL0047198</b>	County(s) in which Facility is Located: Walker
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Company/Permittee Name: Cordova Clay Co., Inc.		Facility Name (e.g., Mine Name, Pit Name, etc.): Riceton Hill Mine	
Mailing Address of Company/Permittee: P. O. Box 100		Physical Address of Facility (as near as possible to entrance): 3781 River Road	
City: Cordova	State: AL	Zip: 35550	City: Cordova
	State: AL		Zip: 35550
Permittee Phone Number: (205) 483-7385	Permittee Fax Number: None	Latitude and Longitude of entrance: 33°45'57.66" N 87°09'26.59" W	

Responsible Official (as described on page 13 of this application): Gail Beaird		Responsible Official Title: President	
Mailing Address of Responsible Official: P. O. Box 100		Physical Address of Responsible Official: 1091 Brick Plant Road	
City: Cordova	State: AL	Zip: 35550	City: Cordova
	State: AL		Zip: 35550
Phone Number of Responsible Official: (205) 483-7385	Fax Number of Responsible Official: None	Email Address of Responsible Official: None	

Facility Contact: Gail Beaird		Facility Contact Title: President	
Physical Address of Facility Contact: 1091 Brick Plant Road		Phone Number of Facility Contact: (205)483-7385	Fax Number of Facility Contact: None
City: Cordova	State: AL	Zip: 35550	Email Address of Facility Contact: None



## II. MEMBER INFORMATION

A. Identify the name, title/position, and unless waived in writing by the Department, the residence address of every officer, general partner, LLP partner, LLC member, investor, director, or person performing a function similar to a director, of the applicant, and each person who is the record or beneficial owner of 10 percent or more of any class of voting stock of the applicant, or any other responsible official(s) of the applicant with legal or decision making responsibility or authority for the facility:

Name:	Title/Position:	Physical Address of Residence (P.O. Box is Not Acceptable)
<u>Gail Beaird</u>	<u>President</u>	<u>3781 River Road, Cordova, AL 35550</u>
<u>Joey Beaird</u>	<u>Vice President</u>	<u>243 Riceton Road, Cordova, AL 35550</u>
<u>Marilyn Beaird</u>	<u>Secretary Treasurer</u>	<u>3781 River Road, Cordova, AL 35550</u>

B. Other than the "Company/Permittee" listed in Part I., identify the name of each corporation, partnership, association, and single proprietorship for which any individual identified in Part II.A. is or was an officer, general partner, LLP partner, LLC member, investor, director, or individual performing a function similar to a director, or principal (10% or more) stockholder, that had an Alabama NPDES permit at any time during the five year (60 month) period immediately preceding the date on which this form is signed:

Name of Corporation, Partnership, Association, or Single Proprietorship:	Name of Individual from Part II.A.:	Title/Position in Corporation, Partnership, Association, or Single Proprietorship:
<u>Beaird Mining and Minerals Co., Inc.</u>	<u>Gail Beaird</u>	<u>President</u>
_____	_____	_____
_____	_____	_____

## III. LEGAL STRUCTURE OF APPLICANT

A. Indicate the legal structure of the "Company/Permittee" listed in Part I:

☒ Corporation   ☐ Association   ☐ Individual   ☐ Single Proprietorship   ☐ Partnership   ☐ LLP   ☐ LLC  
☐ Government Agency: \_\_\_\_\_ ☐ Other: \_\_\_\_\_

B. If not an individual or single proprietorship, is the "Company/Permittee" listed in Part I. properly registered and in good standing with the Alabama Secretary of State's Office? (If the answer is "No," attach a letter of explanation.) ☒ Yes ☐ No

C. Parent Corporation and Subsidiary Corporations of Applicant, if any: There are none.

D. Land Owner(s): Gail Beaird, Joey Beaird, University of Alabama

E. Mining Sub-contractor(s)/Operator(s), if known: There are none.

## IV. COMPLIANCE HISTORY

A. Has the applicant ever had any of the following:

	Yes	No
(1) An Alabama NPDES, SID, or UIC permit suspended or terminated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) An Alabama license to mine suspended or revoked?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3) An Alabama or federal mining permit suspended or terminated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(4) A reclamation bond, or similar security deposited in lieu of a bond, or portion thereof, forfeited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(5) A bond or similar security deposited in lieu of a bond, or portion thereof, the purpose of which was to secure compliance with any requirement of the Alabama Water Improvement Commission or Alabama Department of Environmental Management, forfeited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(If the response to any item of Part IV.A. is "Yes," attach a letter of explanation.)

B. Identify every Warning Letter, Notice of Violation (NOV), Administrative Action, or litigation issued to the applicant, parent corporation, subsidiary, general partner, LLP partner, or LLC member and filed by ADEM or EPA during the three year (36 months) period preceding the date on which this form is signed. Indicate the date of issuance, briefly describe alleged violations, list actions (if any) to abate alleged violations, and indicate date of final resolution:

There are none.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## V. OTHER PERMITS/AUTHORIZATIONS

- A. List any other NPDES or other environmental permits (including permit numbers), authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, Alabama Surface Mining Commission (ASMC), Alabama Department of Industrial Relations (ADIR), or other agency, to the applicant, parent corporation, subsidiary, or LLC member for this facility whether presently effective, expired, suspended, revoked, or terminated:

NPDES Permit AL0047198, DIR Permit 64-5, ASMC Exemption Permits E-51, E-54

- B. List any other NPDES or other ADEM permits (including permit numbers), authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, ASMC, or ADIR, to the applicant, parent corporation, subsidiary, or LLC member for other facilities whether presently effective, expired, suspended, revoked, or terminated:

NPDES Permits AL0031569, AL0025011, AL0046981, AL0044130, AL0048348, AL0055646, AL0056987, AL0060623, AL0060623, AL0067121, DIR Permits 64-1, 664-2, 64-3, 64-6, 64-7, 64-8, 64-9, 64-10, 64-11, 64-12, 64-13, 64-14, 64-15, 64-16, 64-17, 64-18

## VI. PROPOSED SCHEDULE

Anticipated Activity Commencement Date: 2009

Anticipated Activity Completion Date: 2022

## VII. ACTIVITY DESCRIPTION & INFORMATION

- A. Proposed Total Area of the Permitted Site: 133 acres Proposed Total Disturbed Area of the Permitted Site: 10 acres
- B. Township(s), Range(s), Section(s): Township 15 South, Range 6 West, Section 34, Township 16 South, Range 6 West, Section 3
- C. Detailed Directions to Site: From the intersection of Riceton Rd and River Rd in Cordova, AL travel northeasterly on River Rd approximately 0.65 miles to the entrance road on the left.
- D. Is/ will this facility:
- |   | Yes                                 | No                                  |
|---|-------------------------------------|-------------------------------------|
| (1) an existing facility which currently results in discharges to State waters?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (2) a proposed facility which will result in a discharge to State waters?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (3) be located within any 100-year flood plain?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (4) discharge to Municipal Separate Storm Sewer?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (5) discharge to waters of or be located in the Coastal Zone?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (6) need/have ADEM UIC permit coverage?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (7) be located on Indian/ historically significant lands?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (8) need/have ADEM SID permit coverage?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (9) need/have ASMC permit coverage?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (10) need/have ADIR permit coverage?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (11) generate, treat, store, or dispose of hazardous or toxic waste? (If "Yes," attach a detailed explanation.)         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (12) be located in or discharge to a Public Water Supply (PWS) watershed or be located within 1/2 mile of any PWS well? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## VIII. MATERIAL TO BE REMOVED, PROCESSED, OR TRANSLOADED

List relative percentages of the mineral(s) or mineral product(s) that are proposed to be and/or are currently mined, quarried, recovered, prepared, processed, handled, transloaded, or disposed at the facility. If more than one mineral is to be mined, list the relative percentages of each mineral by tonnage for the life of the mine.

___ Dirt &/or Chen	___ Sand &/or Gravel	___ Chalk	___ Tale	___ Crushed rock (other)
___ Bentonite	___ Industrial Sand	___ Marble	90% Shale &/or Common Clay	___ Sandstone
10 % Coal	___ Kaolin	___ Coal fines/refuse recovery	___ Coal product, coke	___ Slag, Red Rock
___ Fire clay	___ Iron ore	___ Dimension stone	___ Phosphate rock	___ Granite
___ Bauxitic Clay	___ Bauxite Ore	___ Limestone, crushed limestone and dolomite		
___ Gold, other trace minerals:		___ Other:		
___ Other:		___ Other:		
___ Other:		___ Other:		

## IX. PROPOSED ACTIVITY TO BE CONDUCTED

A. Type(s) of activity presently conducted at applicant's existing facility or proposed to be conducted at facility (check all that apply):

<input checked="" type="checkbox"/> Surface mining	<input type="checkbox"/> Underground mining	<input type="checkbox"/> Quarrying	<input type="checkbox"/> Auger mining	<input type="checkbox"/> Hydraulic mining
<input type="checkbox"/> Within-bank mining	<input type="checkbox"/> Solution mining	<input checked="" type="checkbox"/> Mineral storing	<input type="checkbox"/> Lime production	<input type="checkbox"/> Cement production
<input type="checkbox"/> Synthetic fuel production	<input type="checkbox"/> Alternative fuels operation	<input checked="" type="checkbox"/> Mineral dry processing (crushing & screening)	<input type="checkbox"/> Mineral wet preparation	
<input type="checkbox"/> Other beneficiation & manufacturing operations		<input checked="" type="checkbox"/> Mineral loading	<input type="checkbox"/> Chemical processing or leaching	
<input type="checkbox"/> Construction related (temporary borrow pits/areas)		<input checked="" type="checkbox"/> Mineral transportation <input type="checkbox"/> rail <input type="checkbox"/> barge <input checked="" type="checkbox"/> truck		
<input type="checkbox"/> Preparation plant waste recovery		<input type="checkbox"/> Hydraulic mining, dredging, instream or between stream-bank mining		
<input checked="" type="checkbox"/> Grading, clearing, grubbing, etc.		<input type="checkbox"/> Pre-construction ponded water removal	<input checked="" type="checkbox"/> Excavation	
<input checked="" type="checkbox"/> Pre-mining logging or land clearing		<input type="checkbox"/> Waterbody relocation or other alteration	<input type="checkbox"/> Creek/stream crossings	
<input type="checkbox"/> Onsite construction debris or equipment storage/disposal		<input type="checkbox"/> Onsite mining debris or equipment storage/disposal		
<input checked="" type="checkbox"/> Reclamation of disturbed areas		<input type="checkbox"/> Chemicals used in process or wastewater treatment (coagulant, biocide, etc.)		
<input type="checkbox"/> Adjacent/associated asphalt/concrete plant(s)		<input type="checkbox"/> Low volume sewage treatment package plant		
<input type="checkbox"/> Other: _____				

B. Primary SIC Code: 1459 Description: Surface mining of clay and shale

Secondary SIC Code(s): 1221 Description: Surface mining of bituminous coal

C. Narrative Description of the Activity: Surface mining of clay, shale and coal using mobile equipment

## X. FUEL - CHEMICAL HANDLING, STORAGE & SPILL PREVENTION CONTROL & COUNTERMEASURES (SPCC) PLAN

A. Will fuels, chemicals, compounds, or liquid waste be used or stored onsite? ☐ Yes ☒ No

B. If "Yes," identify the fuel, chemicals, compounds, or liquid waste and indicate the volume of each:

Volume	Contents	Volume	Contents	Volume	Contents
_____ gallons	_____	_____ gallons	_____	_____ gallons	_____

C. If "Yes," a detailed SPCC Plan with acceptable format and content, including diagrams, must be attached to application in accordance with ADEM Admin. Code R. 335-6-6-.12(r). Unless waived in writing by the Department on a programmatic, categorical, or individual compound/chemical basis, Material Safety Data Sheets (MSDS) for chemicals/compounds used or proposed to be used at the facility must be included in the SPCC Plan submittal.

## XI. POLLUTION ABATEMENT & PREVENTION (PAP) PLAN

A. For non-coal mining facilities, a PAP Plan in accordance with ADEM Admin. Code r. 335-6-9-.03 has been completed and is attached as part of this application. ☒ Yes ☐ No

B. For coal mining facilities, a detailed PAP Plan has been submitted to ASMC according to submittal procedures for ASMC regulated facilities. ☐ Yes ☐ No

(1) If "Yes" to Part XI.B., provide the date that the PAP Plan was submitted to ASMC: \_\_\_\_\_

(2) If "No" to Part XI.B., provide the anticipated date that the PAP Plan will be submitted to ASMC: \_\_\_\_\_

## XII. TOPOGRAPHIC MAP SUBMITTAL

Attach to this application a 7.5 minute series U.S.G.S. topographic map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary), of the area extending to at least one mile beyond property boundaries. The topographic or equivalent map(s) must include a caption indicating the name of the topographic map, name of the applicant, facility name, county, and township, range, & section(s) where the facility is located. Unless approved in advance by the Department, the topographic or equivalent map(s), or a minimum, must show:

(a) An outline of legal boundary of entire property (property lines and lease boundaries)	(i) All surrounding unimproved/improved roads
(b) An outline of the facility	(j) High-tension power lines and railroad tracks
(c) All existing and proposed disturbed areas	(k) Buildings and structures, including fuel/water tanks
(d) Location of discharge areas	(l) Contour lines, township-range-section lines
(e) Proposed and existing discharge points	(m) Drainage patterns, swales, washes
(f) Perennial, intermittent, and ephemeral streams	(n) All drainage conveyance/treatment structures (ditches, berms, etc.)
(g) Lakes, springs, water wells, wetlands	(o) Any other pertinent or significant feature
(h) All known facility dirt/improved access/haul roads	

Attach to this application a 1:500 scale or better, detailed auto-CAD map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary), of the facility. The facility map(s) must include a caption indicating the name of the facility, name of the applicant, facility name, county, and township, range, & section(s) where the facility is located. Unless approved in advance by the Department, the facility or equivalent map(s), at a minimum, must show:

(a) Information listed in Item XII (a) – (o) above	(e) Location of mining or pond cleanout waste storage/disposal areas
(b) If noncoal, detailed, planned mining progression	(f) Other information relevant to facility or operation
(c) If noncoal, location of topsoil storage areas	(g) Location of facility sign showing Permittee name, facility name, and NPDES Number
(d) Location of ASMC bonded increments (if applicable)	

List the requested permit action for each outfall (issue, reissue, add, delete, move, etc.), outfall designation including denoting "E" for existing and "P" for proposed outfalls, name of receiving water(s), whether or not the stream is included in a TMDL, latitude and longitude (to seconds) of location(s) of each discharge point, distance of receiving water from outfall in feet, number of disturbed acres, the number of drainage acres which will drain through each treatment system, outfall, or BMP, and if the outfall discharges to an ADEM listed CWA Section 303(d) waterbody segment at the time of application submittal.

[illegible]

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#### A. Modified EPA Form 2C Submittal

- ☒ No, the applicant does not request a waiver and a complete modified EPA Form 2C is attached.

B. The applicant is required to supply the following information separately for every P or E outfall. If necessary, attach extra sheets. List expected average daily discharge flow rate in cfs and gpd, frequency of discharge in hours per day and days per month, average summer and winter temperature of discharge(s) in degrees centigrade (C), average pH in standard units, average daily discharge in pounds per day of BODs, Total Suspended Solids, Total Iron, Total Manganese, and Total Aluminum (if bauxite or bauxitic clay):

[illegible]

C. The applicant is required to supply the following information separately for every P or E outfall. If necessary, attach extra sheets. Identify and list expected average daily discharge in pounds per day of any other pollutant(s) listed in EPA Form 2C, Item V - Intake And Effluent Characteristics, Parts A, B, & C that are not referenced in Part XV.B., that you know is present or have reason to believe could be present in the discharge(s) at levels of concern: There are none

[illegible]



**XVII. PROPOSED NEW OR INCREASED DISCHARGES**

A. Pursuant to ADEM Admin. Code Chapter 335-6-10-.12(9), responses to the following questions must be provided by the applicant requesting NPDES permit coverage for new or expanded discharges of pollutant(s) to Tier 2 waters (except discharges eligible for coverage under general permits). As part of the permit application review process, the Department is required to consider, based on the applicant's demonstration, whether the proposed new or increased discharge to Tier 2 waters is necessary for important economic or social development in the area in which the waters are located.

- ☐ Yes. New/increased discharges of pollutant(s) or discharge locations to Tier 2 waters are proposed.
- ☒ No. New/increased discharges of pollutant(s) or discharge locations to Tier 2 waters are not proposed.

B. If "Yes," complete this Part (XVII.B.), Part XVIII, and XIX. Attach additional sheets/documentation and supporting information as needed.

(1) What environmental or public health problem will the discharge be correcting?

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(2) How much will the discharger be increasing employment (at its existing facility or as a result of locating a new facility)?

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(3) How much reduction in employment will the discharger be avoiding?

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(4) How much additional state or local taxes will the discharger be paying?

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(5) What public service to the community will the discharger be providing?

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(6) What economic or social benefit will the discharger be providing to the community?

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**XVIII. ALTERNATIVES ANALYSIS – ADEM Form 311 3/02**

Pursuant to ADEM Admin. Code Chapter 335-6-10, an evaluation of the discharge alternatives identified below has been completed and the following conclusions were reached. All proposed new or expanded discharges of pollutant(s) covered by the Individual NPDES permitting program are subject to the provisions of the antidegradation policy. As part of the permit application review process, the Department is required to determine, based on the applicant's demonstration, that the proposed new or increased discharge to Tier 2 waters is necessary for important economic or social development in the area in which the waters are located. As a part of this demonstration, a registered professional engineer (PE) licensed to practice in the State of Alabama must complete an evaluation of the discharge alternatives, to include calculation of total annualized project costs (Item XIX) for each technically feasible alternative. Technically feasible alternatives with total annualized pollution control project costs that are less than 110% of the preferred alternative total annualized pollution control project costs for the Tier 2 new or increased discharge proposal are considered viable alternatives. Supporting documentation is attached, referenced, or otherwise handled as appropriate.

Alternative	Viable	Non-Viable	Reason/Rationale For Indicating Non-Viable
1) Treatment/Discharge Proposed In This Application	X		
2) Land Application		X	Not feasible
3) Pretreatment/Discharge to POTW By SID Permit		X	Not feasible
4) Relocation of Discharge		X	Topography will not allow this method.
5) Reuse/Recycle – Pollution Prevention		X	There are no viable methods for reuse/recycle of the pollutants.
6) Other Process/Treatment Alternatives		X	There are no process/treatment alternatives.
7) Underground Injection By UIC Permit		X	Topography and geology will not allow this method.
8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM			
9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM			

COMMENTS:

**XIX. CALCULATION OF TOTAL ANNUALIZED PROJECT COSTS FOR PRIVATE SECTOR PROJECTS - ADEM Form 313 8/02**  
 (ADEM Form 312 3/02 - Public Sector Project is available upon request)

This item must be completed for each technically feasible alternative evaluated in Item XVIII. Copy, complete, and attach additional blocks/sheets and supporting information as needed.

Capital Costs of pollution control project to be expended or financed by applicant (Supplied by applicant)	\$ 25,000 (1)	* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.
Interest Rate for Financing (Expressed as a decimal)	0.10 (i)	
Time Period of Financing (Assume 10 years *)	10 years (n)	
Annualization Factor ** = $\frac{i}{(1+i)^n - 1}$	0.16275 (2)	
Annualized Capital Cost [Calculate: (1) x (2)]	\$ 4,068 (3)	** Or refer to Appendix B (application information) for calculated annualization factors.  *** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).
Annual Cost of Operation & Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration & replacement) ***	\$ 1,660 (4)	
Total Annual Cost of Pollution Control Project { (3) + (4) }	\$ 30,728 (5)	

Y	N	N/A	004E
X			Runoff from all areas of disturbance is controlled
X			Drainage from pit area, stockpiles, and spoil areas directed to a sedimentation pond
X			Sedimentation basin at least 0.25 acre/feet for every acre of disturbed drainage
X			Sedimentation basin cleaned out when sediment accumulation is 60% of design capacity
X			Trees, boulders, and other obstructions removed from pond during initial construction
X			Width of top of dam greater than 12'
X			Side slopes of dam no steeper than 3:1
X			Cutoff trench at least 8' wide
X			Side slopes of cutoff trench no less than 1:1
X			Cutoff trench located along the centerline of the dam
X			Cutoff trench extends at least 2' into bedrock or impervious soil
X			Cutoff trench filled with impervious material
X			Embankments and cutoff trench 95% compaction standard proclor ASTM
X			Embankment free of roots, tree debris, stones >6" diameter, etc.
X			Embankment constructed in lifts no greater than 12"
X			Spill pipe sized to carry peak flow from a one year storm event
X			Spill pipe will not chemically react with effluent
X			Subsurface withdrawal
X			Anti-seep collars extend radially at least 2' from each joint in spill pipe
X			Splash pad at the end of the spill pipe
X			Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream
X			Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream
X			Emergency overflow at least 20' long
X			Side slopes of emergency spillway no steeper than 2:1
X			Emergency spillway lined with riprap or concrete
X			Minimum of 1.5' of freeboard between normal overflow and emergency overflow
X			Minimum of 1.5' of freeboard between max. design flow of emergency spillway and top of dam
X			All emergency overflows are sized to handle entire drainage area for ponds in series
X			Dam stabilized with permanent vegetation
X			Sustained grade of haul road <10%
X			Maximum grade of haul road <15% for no more than 300'
X			Outer slopes of haul road no steeper than 2:1
X			Outer slopes of haul road vegetated or otherwise stabilized
X			Detail drawings supplied for all stream crossings
X			Short-Term Stabilization/Grading And Temporary Vegetative Cover Plans
X			Long-Term Stabilization/Grading And Permanent Reclamation or Water Quality Remediation Plans

X	The applicant has completed the surface water discharge alternatives analysis and has supporting documentation, including annualized costs for each technically feasible alternative available for review upon request
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IDENTIFY AND PROVIDE DETAILED EXPLANATION FOR ANY "N" OR "N/A" RESPONSE(S):

[illegible]

# XXI. POLLUTION ABATEMENT PLAN (PAP) REVIEW CHECKLIST

Y	N	N/A	
X			PE Seal with License #
X			Name and Address of Operator
X			Legal Description of Facility
<b>General Information:</b>			
X			Name of Company
		X1	Number of Employees
X			Products to be Mined
		X1	Hours of Operation
X			Water Supply and Disposition
<b>Topographic Map:</b>			
X			Mine Location
		X 2	Location of Prep Plant
X			Location of Treatment Basins
X			Location of Discharge Points
X			Location of Adjacent Streams
<b>1"- 500' or Equivalent Facility Map:</b>			
X			Drainage Patterns
X			Mining Details
X			All Roads, Structures Detailed
X			All Treatment Structures Detailed
<b>Detailed Design Diagrams:</b>			
X			Plan Views
X			Cross-section Views
X			Method of Diverting Runoff to Treatment Basins
<b>Narrative of Operations:</b>			
X			Raw Materials Defined
X			Processes Defined
X			Products Defined
<b>Schematic Diagram:</b>			
X			Points of Waste Origin
X			Collection System
X			Disposal System
<b>Post Treatment Quantity and Quality of Effluent:</b>			
X			Flow
X			Suspended Solids
X			Iron Concentration
X			pH
<b>Description of Waste Treatment Facility:</b>			
X			Pre-Treatment Measures
X			Recovery System
X			Expected Life of Treatment Basin
X			Schedule of Cleaning and/or abandonment
<b>Other:</b>			
X			Precipitation/Volume Calculations/Diagram Attached
X			BMP Plan for Haul Roads
X			Measures for Minimizing Impacts to Adjacent Stream i.e., Buffer Strips, Berms, etc.
X			Methods for Minimizing Nonpoint Source Discharges
X			Facility Closure Plans
		X 3	PE Rationale(s) For Alternate Standards, Designs or Plans

## IDENTIFY AND PROVIDE DETAILED EXPLANATION FOR ANY "N" OR "N/A" RESPONSE(S):

X1) The number of employees and hours of operation will vary as the market demands.
X2) No preparation plant will be located at this facility.
X3) No alternate standards, designs or plans are proposed.

XXII. INFORMATION

**Contact the Department prior to submittal with any questions or to request acceptable alternate content/format. Be advised that you are not authorized to commence regulated activity until this application can be processed, publicly noticed, and approval to proceed is received in writing from the Department.**

EPA Form(s) 1 and 2F need not be submitted unless specifically required by the Department. EPA Form(s) 2C and/or 2D are required to be submitted unless the applicant is eligible for a waiver and the Department grants a waiver.

Planned/proposed mining sites that are greater than 5 acres, that mine/process coal or metallic mineral/ore, or that have wet or chemical processing, must apply for and obtain coverage under an Individual NPDES Permit prior to commencement of any land disturbance. Such coverage may be requested via this ADEM Form 315.

The applicant is advised to contact:

- (1) The Alabama Surface Mining Commission (ASMC) if coal, coal fines, coal refuse, or other coal related materials are mined, transloaded, processed, *etc.*;
- (2) The Alabama Department of Industrial Relations (ADIR) if conducting non-coal mining operations;
- (3) The Alabama Historical Commission for requirements related to any potential historic or culturally significant sites;
- (4) The Alabama Department of Conservation and Natural Resources (ADCNR) for requirements related to potential presence of threatened/endangered species; and
- (5) The US Army Corps of Engineers, Mobile or Nashville Districts, if this project could cause fill to be placed in federal waters or could interfere with navigation.

The Department must be in receipt of a completed version of this form, including any supporting documentation, and the appropriate processing fee (including Greenfield Fee and Biomonitoring & Toxicity Limits fee(s), if applicable), prior to development of a draft NPDES permit. Send the completed form, supporting documentation, and the appropriate fees to:

Water Division  
Alabama Department of Environmental Management  
Post Office Box 301463  
Montgomery, Alabama 36130-1463  
Phone: (334) 271-7823  
Fax: (334) 279-3051  
h2omail@ade.m.state.al.us  
www.adem.alabama.gov

### XXIII. PROFESSIONAL ENGINEER (PE) CERTIFICATION

A detailed, comprehensive Pollution Abatement/Prevention Plan (PAP) must be prepared, signed, and certified by a professional engineer (PE), registered in the State of Alabama as follows:

"I certify on behalf of the applicant, that I have completed an evaluation of discharge alternatives (Item XVIII) for any proposed new or increased discharges of pollutant(s) to Tier 2 waters and reached the conclusions indicated. I certify under penalty of law that technical information and data contained in this application, and a comprehensive PAP Plan including any attached SPCC plan, maps, engineering designs, etc. acceptable to ADEM, for the prevention and minimization of all sources of pollution in stormwater and authorized related process wastewater runoff has been prepared under my supervision for this facility utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6, including Chapter 335-6-9 and Appendices A & B. If the PAP plan is properly implemented and maintained by the Permittee, discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other permit requirements. The applicant has been advised that appropriate pollution abatement/prevention facilities and structural & nonstructural management practices or Department approved equivalent management practices as detailed in the PAP plan must be fully implemented and regularly maintained as needed at the facility in accordance with good sediment, erosion, and other pollution control practices, permit requirements, and other ADEM requirements to ensure protection of groundwater and surface water quality."

Address PERC Engineering Co., Inc., P. O. Box 1712, Jasper, AL 35502-1712

PE Registration # 14117-F

Name and Title (type or print) Leslie G. Stephens, P.E. / P.L.S.

Phone Number (205)295-3127

Signature 

Date Signed 03/04/2016

### XXIV. RESPONSIBLE OFFICIAL SIGNATURE

This application must be signed by a Responsible Official of the applicant pursuant to ADEM Admin. Code Rule 335-6-6-.09 who has overall responsibility for the operation of the facility.

"I certify under penalty of law that this document, including technical information and data, the PAP plan, including any SPCC plan, maps, engineering designs, and all other attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the PE and other person or persons under my supervision who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations.

A comprehensive PAP Plan to prevent and minimize discharges of pollution to the maximum extent practicable has been prepared at my direction by a PE for this facility utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6, including Chapter 335-6-9 and Appendices A & B, and information contained in this application, including any attachments. I understand that regular inspections must be performed by, or under the direct supervision of, a PE and all appropriate pollution abatement/prevention facilities and structural & nonstructural management practices or Department approved equivalent management practices identified by the PE must be fully implemented prior to and concurrent with commencement of regulated activities and regularly maintained as needed at the facility in accordance with good sediment, erosion, and other pollution control practices and ADEM requirements. I understand that the PAP plan must be fully implemented and regularly maintained so that discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other requirements to ensure protection of groundwater and surface water quality. I understand that failure to fully implement and regularly maintain required management practices for the protection of groundwater and surface water quality may subject the Permittee to appropriate enforcement action.

I certify that this form has not been altered, and if copied or reproduced, is consistent in format and identical in content to the ADEM approved form.

I further certify that the discharges described in this application have been tested or evaluated for the presence of non-stormwater discharges and any non-mining associated beneficiation/process pollutants and wastewaters have been fully identified."

Name (type or print) Joey Beard

Official Title Vice President

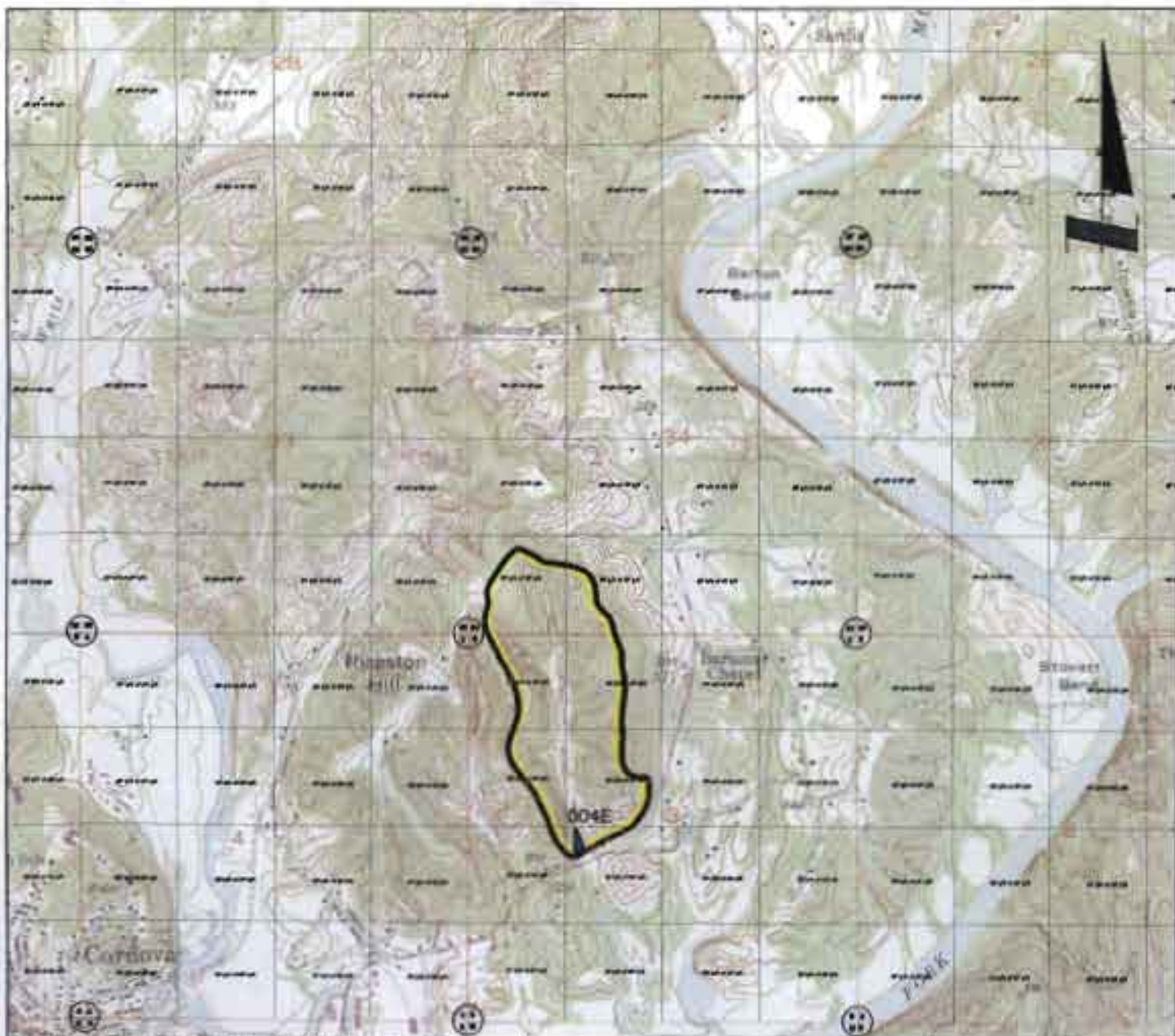
Signature 

Date Signed 3/04/2016

\*335-6-6-.09 Signatories to Permit Applications and Reports.



(1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:

- In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;
- In the case of a partnership, by a general partner;
- In the case of a sole proprietorship, by the proprietor; or
- In the case of a municipal, state, federal, or other public entity by either a principal executive officer, or ranking elected official.



BASE MAP TAKEN FROM THE CORDOVA, ALABAMA U.S.G.S. QUADANGLES.

### LEGEND

-  Permit Boundary
-  Sediment Basin



**PERC**  
ENGINEERING CO., INC.  
1000 Hwy. 70 West, Jasper, AL 35891, P.O. Box 1719-0000  
(205) 346-0000 Office (205) 360-0014 Fax

## **CORDOVA CLAY CO., INC. RICETON HILL MINE NPDES PERMIT MAP**

SEC. 34, TOWNSHIP 14 SOUTH, RANGE 6 WEST,  
SEC. 3, TOWNSHIP 15 SOUTH, RANGE 6 WEST  
WALKER COUNTY, ALABAMA

DWG NAME: CO-NPDES PERMIT MAP  
DRAWN BY: S.A.E.  
APPROVED BY: R.E.P.

DATE: 03/03/2016  
SCALE: 1"=2000'  
JOB NUMBER: 00-03875-002

C:\Users\jordan\Documents\00-03875-002\00-03875-002.dwg 03/03/2016 13:38



LEGEND

-  Permit Boundary
-  Sediment Basin

V:\Mining\Cordova Clay\Riceton Hill Mine\CC-NPDES PERMIT MAP.dwg 03/03/16 12:28

BASE MAP TAKEN FROM THE CORDOVA, ALABAMA U.S.G.S. QUADRANGLES.



**PERC**  
ENGINEERING CO., INC.  
1606 Highway 78 West Jasper, Alabama 35501  
P.O. Box 1712 Jasper, Alabama 35502  
(205) 384-5553 Office (205) 285-3114 Fax

drawn by: S.A.E. job number: 02-03875-002  
checked by: R.E.P. date: 03/03/2016  
scale: 1"=500' dwg name: CC-NPDES PERMIT MAP

**CORDOVA CLAY CO., INC.**  
**RICETON HILL MINE**  
**NPDES PERMIT MAP**  
SEC. 34, TOWNSHIP 14 SOUTH, RANGE 6 WEST,  
SEC. 3, TOWNSHIP 15 SOUTH, RANGE 6 WEST  
WALKER COUNTY, ALABAMA

## ATTACHMENT FOR APPENDIX A & B (continued)

### SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF PRIMARY ROADS

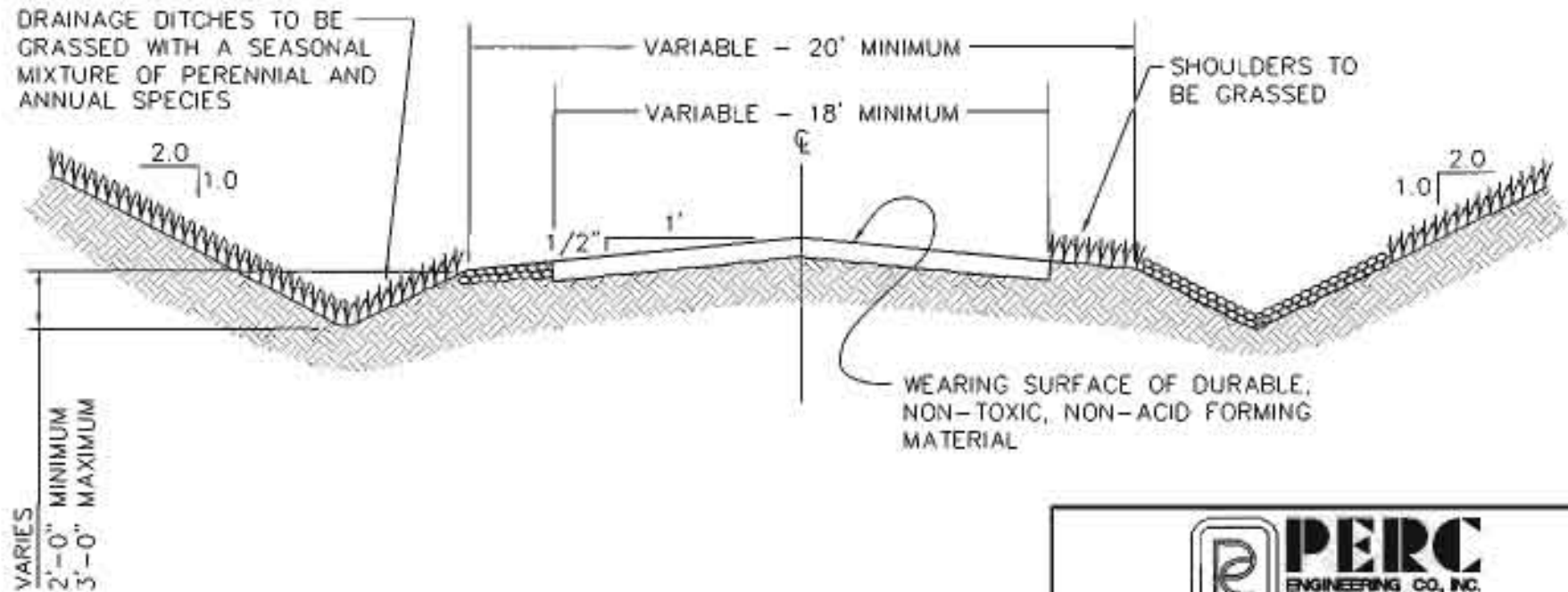
1. Primary roads shall be designed by or under the direction of a registered professional engineer in accordance with the Alabama Surface Mining Commission rules and regulations and prudent engineering practice.
2. Each roadway embankment will be designed and constructed so as to have a minimum static safety factor of 1.3.
3. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.
4. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality. No fording of intermittent or perennial streams will be conducted unless specifically approved by the Alabama Surface Mining Commission as temporary routes to be used during road construction.
5. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.
6. Roads will be constructed of suitable compacted subgrade material. The material will be free of sod, roots, stones over 12 inches in diameter, and other objectionable materials. The material will be placed and spread over the entire fill area, starting at the lowest point in layers not to exceed 12 inches in thickness. The material will be compacted to 95 percent of the density, based on standard proctor as outlined in ASTM.
7. Primary roads will have a minimum width of eighteen feet and a maximum width necessary to accommodate the largest equipment traveling the road.
8. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. The wearing surface will consist of durable sandstone, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, iron ore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority. The wearing surface will be placed on the roadbed to a depth of four inches.
9. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drainways will be located at a minimum distance of three-hundred feet.
10. Roads will be constructed so as to have adequate drainage utilizing ditches, culverts, cross drains and ditch relief drains designed to safely pass the peak runoff from a ten year, six hour precipitation event. Drainage pipes and culverts shall be installed as designed and will be maintained in a free and operating

condition to prevent and control erosion at inlets and outlets. Culverts have been designed to support the load of the heaviest equipment to travel the road and are based on the Handbook of Steel Drainage and Highway Construction Products by the American Iron and Steel Institute and the equipment specifications. Drainage ditches will be constructed and maintained in accordance with the approved design to prevent uncontrolled drainage over the road surface and embankment. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed and constructed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: Bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application. Upon completion of construction of each phase of the roadway the construction will be certified to the Alabama Surface Mining Commission as having been done in accordance with the approved plans for the roadway and associated facilities.

11. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.
12. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:
  - a. The road will be closed to traffic.
  - b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
  - c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.
  - d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
  - e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.
  - f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.
13. The drawings and data contained in the specific design plans illustrate typical roadbed configurations for primary roads as well as site specific design of drainage structures, stability analysis and ditch sections.

# TYPICAL PRIMARY HAUL ROAD CUT SECTION

NO SCALE



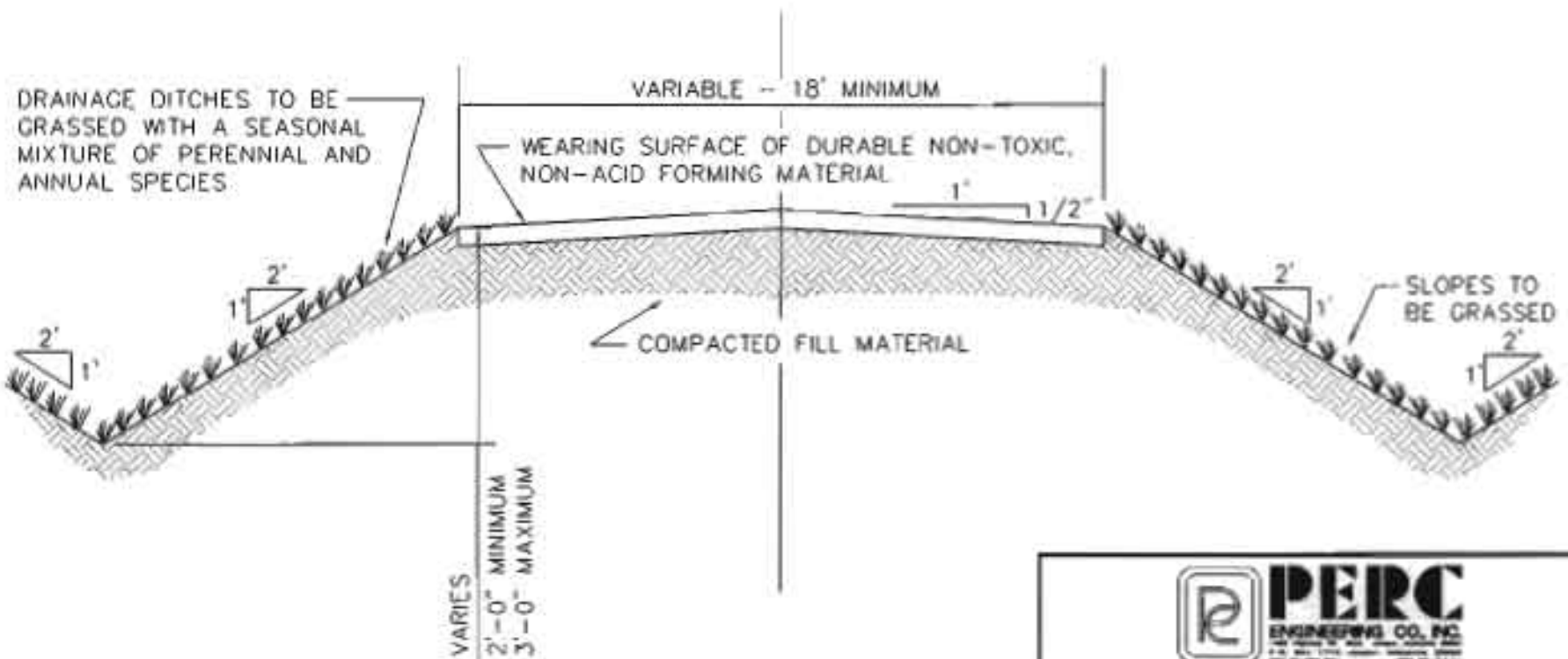
## TYPICAL CUT SECTION PRIMARY HAUL ROAD

DRAWN BY: S.W.L.	DATE: 12-10-2006
DWG. NAME: TYPHAULC	
APPROVED BY: L.G.S.	SCALE: NONE

ATTACHMENT III - B - 5.

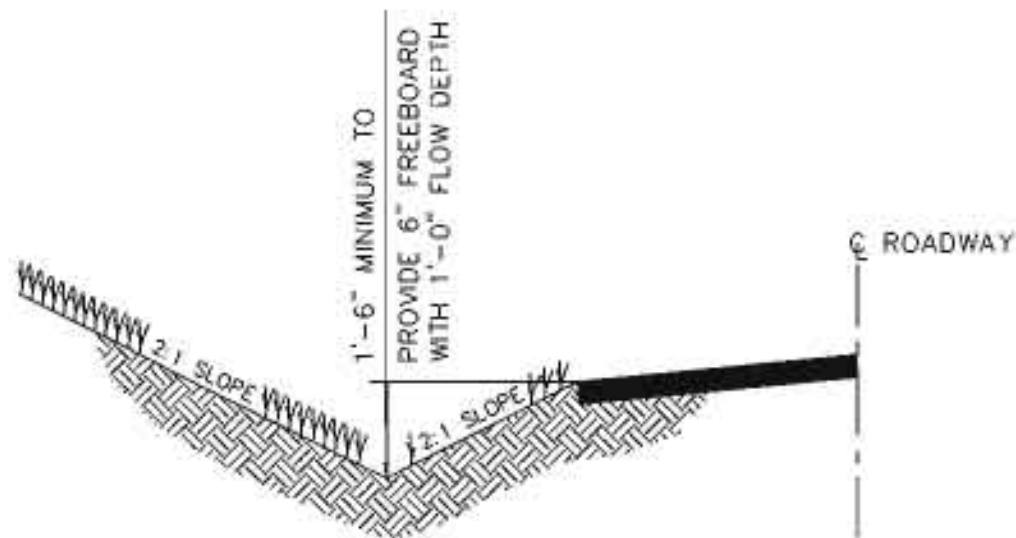
# **TYPICAL PRIMARY HAUL ROAD FILL SECTION**

NO SCALE



## **TYPICAL FILL SECTION PRIMARY HAUL ROAD**

DRAWN BY: S.W.L.	DATE: 12-10-2008
DWG. NAME: TYFHAULF	
APPROVED BY: L.G.S.	SCALE: NONE



MINIMUM DITCH GRADIENT = 1%

MAXIMUM DITCH GRADIENT = 5%

DITCH CHANNEL TO BE VEGETATED WITH  
A MIXTURE OF BERMUDA GRASS, FESCUE,  
AND LESPEDEZA TO CONFORM TO CLASS  
"D" RETARDANT CLASS.



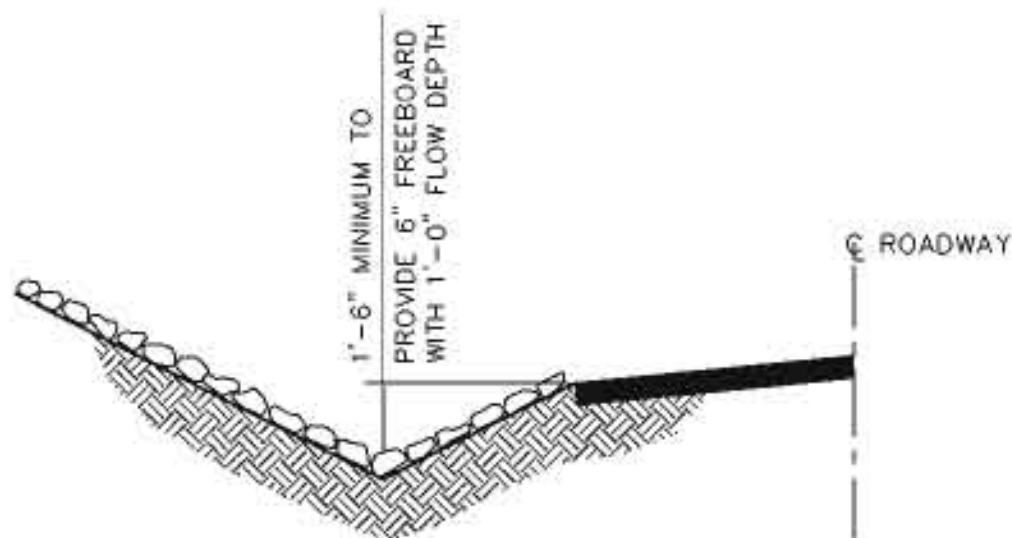
## TYPICAL PRIMARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.E.P.  
DWG. NAME: PRIMRD3

DATE: 1-30-08

APPROVED BY: W.P.G.

SCALE: NONE



DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE  
NON-TOXIC, NON-ACID FORMING SANDSTONE OR  
LIMESTONE RIPRAP. THE RIPRAP WILL BE "CLASS 1"  
RIPRAP AND HAVE A MINIMUM THICKNESS OF 12".



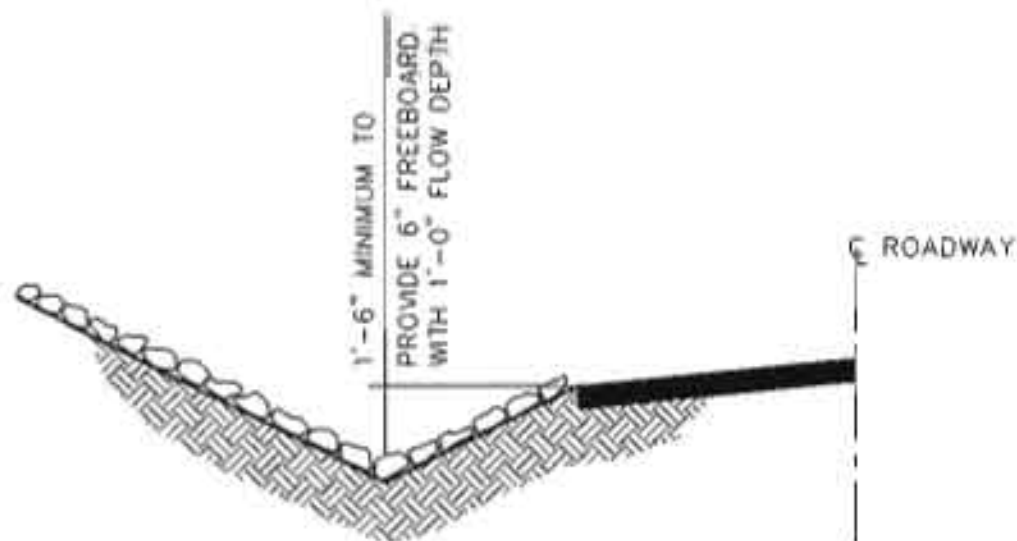
### TYPICAL PRIMARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.E.P.  
DWG. NAME: PRIMRD4

DATE: 1-30-08

APPROVED BY: W.P.G.

SCALE: NONE



DITCH GRADIENT 11% TO 17%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE  
NON-TOXIC, NON-ACID FORMING SANDSTONE OR  
LIMESTONE RIPRAP. THE RIPRAP WILL BE "CLASS 2"  
RIPRAP AND HAVE A MINIMUM THICKNESS OF 16".



### TYPICAL PRIMARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.E.P.  
DWG. NAME: PRIMROS

DATE: 1-30-08

APPROVED BY: W.P.G.

SCALE: NONE

**SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE  
AND RECLAMATION OF ANCILLARY ROADS**

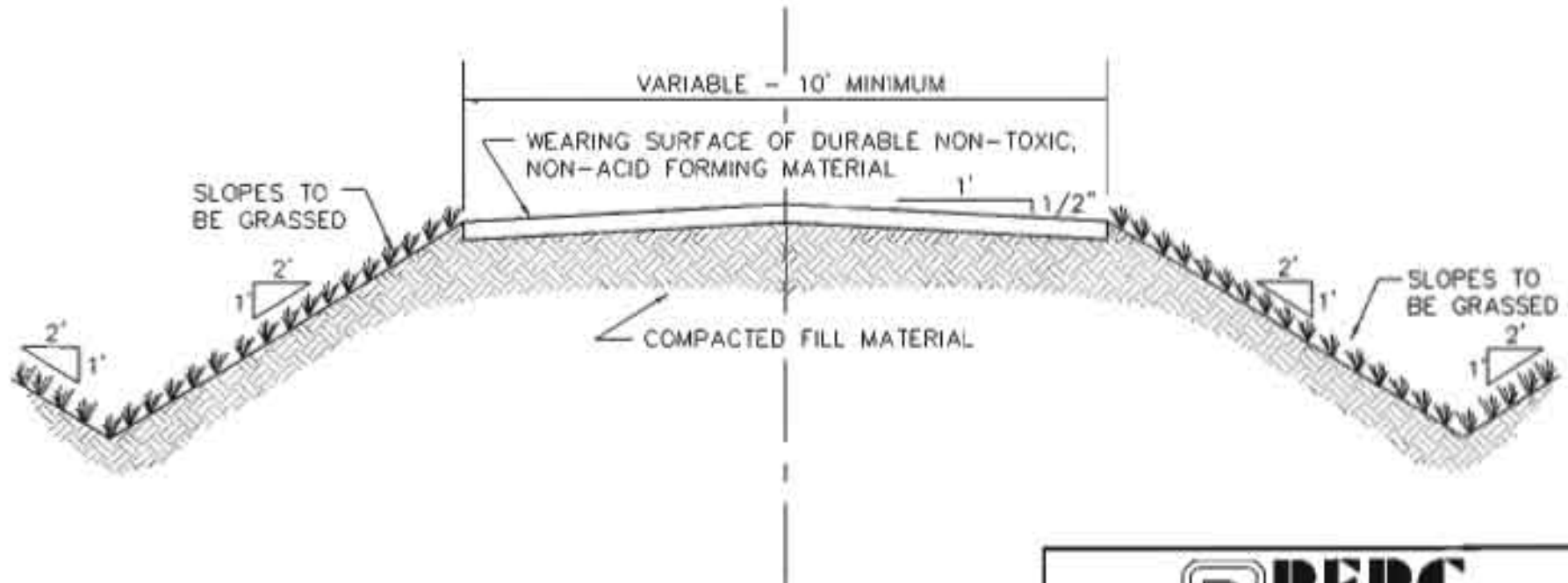
1. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.
2. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality.
3. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.
4. Roads will be constructed of suitable compacted subgrade material. The material will be free of sod, roots, stones over 12 inches in diameter, and other objectionable materials. The material will be placed and spread over the entire fill area, starting at the lowest point in layers not to exceed 12 inches in thickness. The material will be compacted to 95 percent of the density, based on standard proctor as outlined in ASTM.
5. Ancillary roads will have a minimum width of ten feet and a maximum width necessary to accommodate the largest equipment traveling the road.
6. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. It is anticipated that durable sandstone overburden on site will be utilized as surfacing material. If there should not be adequate sandstone on site, then a durable sandstone material, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, iron ore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority will be hauled in from off site and placed on the roadbed to a depth of two inches.
7. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drain ways will be located at a minimum distance of three-hundred feet.
8. Roads will be constructed so as to have adequate drainage utilizing ditches, cross drains and ditch relief drains. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual

and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: Bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application.

9. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.
10. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:
  - a. The road will be closed to traffic.
  - b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
  - c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.
  - d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
  - e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.
  - f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.
11. The following drawings illustrate typical roadbed configurations for ancillary roads.

# **TYPICAL HAUL ROAD FILL SECTION**

NO SCALE



## **TYPICAL FILL SECTION ANCILLARY HAUL ROAD**

DRAWN BY: K.O.P.  
DWG. NAME: TYPHAULA

DATE: 2-3-97

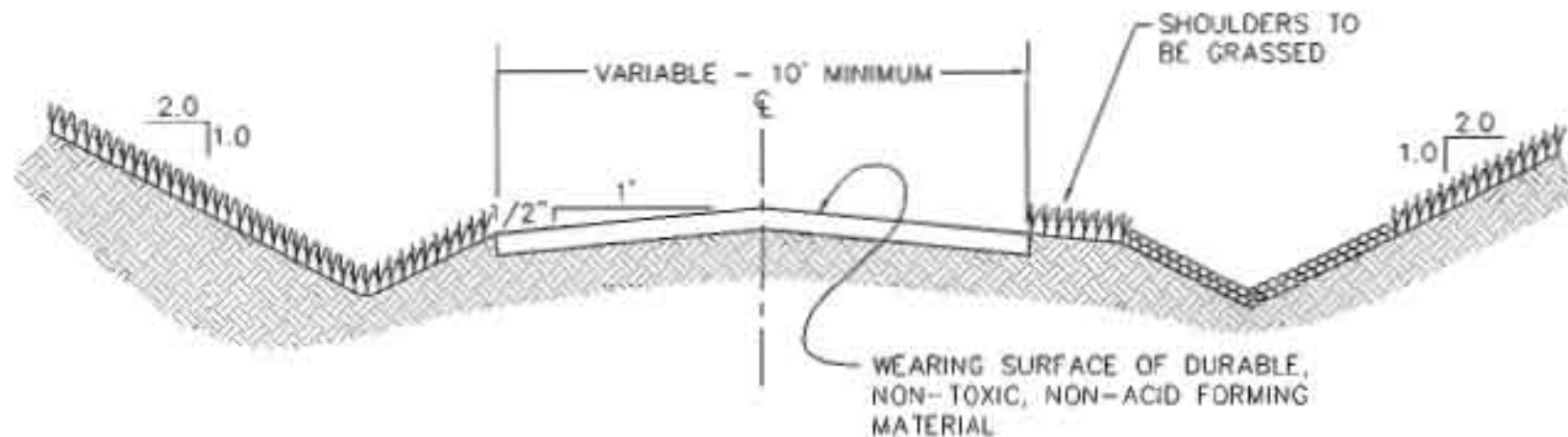
APPROVED BY: S.R.I.

SCALE: NONE

ATTACHMENT III - B. - 5.

# TYPICAL HAUL ROAD CUT SECTION

NO SCALE



## **TYPICAL CUT SECTION** **ANCILLARY HAUL ROAD**

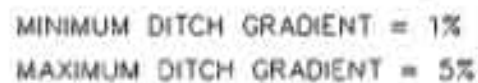
DRAWN BY: K.O.P.  
CHK. NAME: TYPHAULB

DATE: 2-3-97

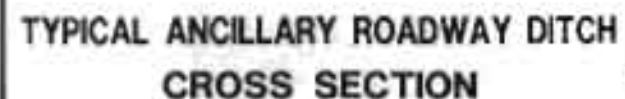
APPROVED BY: S.R.L.

SCALE: NONE

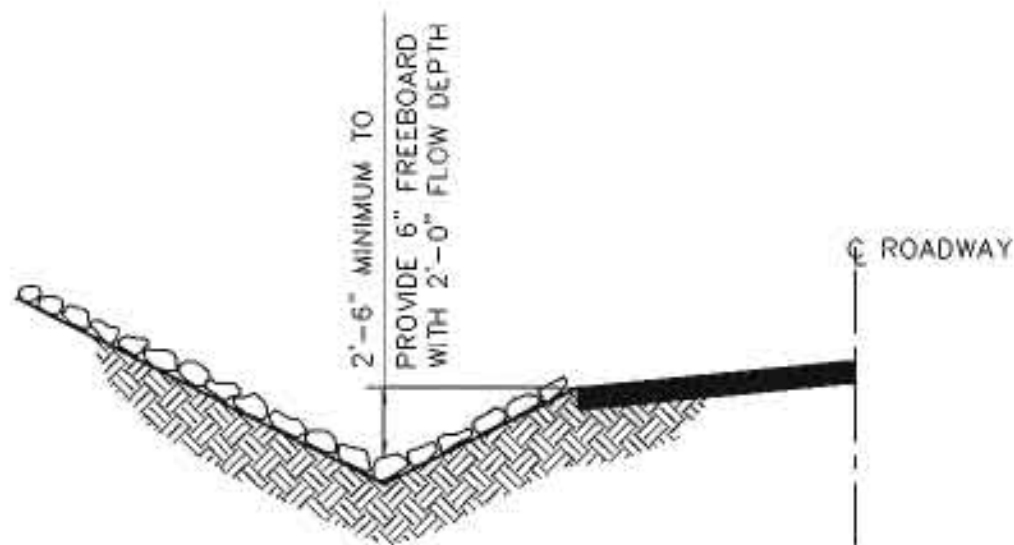
ATTACHMENT III-B-5



DITCH CHANNEL TO BE VEGETATED WITH A MIXTURE OF BERMUDA GRASS, FESCUE, AND LESPEDEZA TO CONFORM TO CLASS "D" RETARDANT CLASS.



SCALE: NONE



DITCH GRADIENT 5% TO 10%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE  
NON-TOXIC, NON-ACID FORMING SANDSTONE OR  
LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 1"  
RIP-RAP AND HAVE A MINIMUM THICKNESS OF 12".



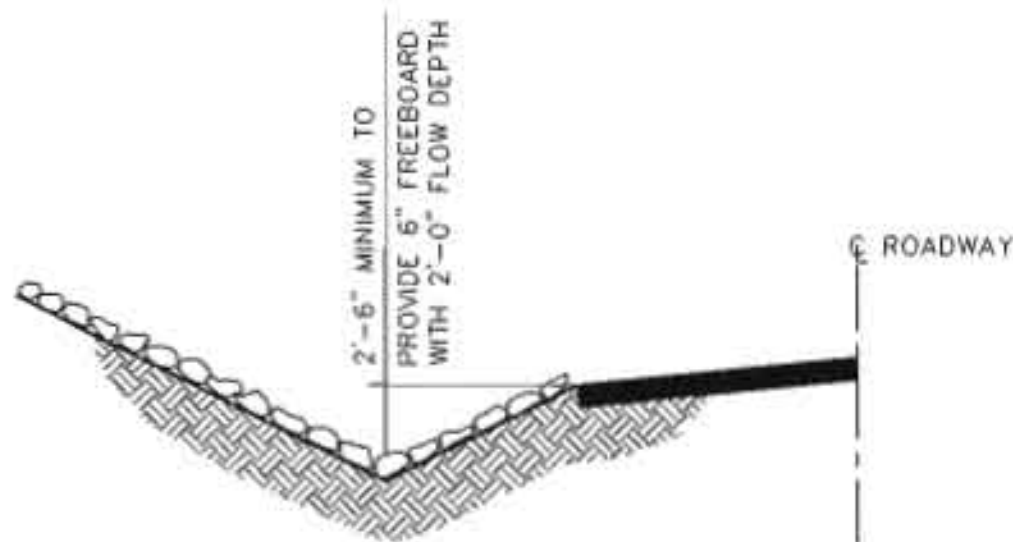
## TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.D.P.  
DWG. NAME: PRIMRD1

DATE: 2-4-97

APPROVED BY: R.E.P.

SCALE: NONE



DITCH GRADIENT 11% TO 17%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 2" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 16".



### TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.O.P.	DATE: 2-4-97
DWG. NAME: PRIM02	
APPROVED BY: R.E.P.	SCALE: NONE

COAL MINING AND/OR PREPARATION PLANT APPLICATION METALS, CYANIDE, AND TOTAL PHENOLS OUTFALL DATA															
APPLICANT		FACILITY						FACILITY							
AL0047198		Cordova Clay Co., Inc., P. O. Box 100, Cordova AL, 35550. Phone: (205)275-3151						Riceton Hill Mine							
OUTFALL #		DATE SAMPLED		SUBSTANTIALLY IDENTICAL OUTFALLS											
004		2/10/2017													
Please supply the following information separately for every P outfall evaluated or E outfall listed. If necessary, attach extra sheets. If you are a coal facility mark "X" in appropriate column for all listed metals, cyanide, and total phenols. If the outfall is existing, you must provide the results of at least one analysis for that pollutant. If the outfall is proposed you must either submit at least one representative analysis for a substantially identical existing outfall at the facility, or if not available, at least one representative analysis for a substantially identical outfall at another similar facility.															
POLLUTANT AND CAS NO. (if available) N	MARK "X"			EPA/STATE											
	TESTING REQUIRED EXISTING OUTFALL	BELIEVED PRESENT PROPOSED OUTFALL	BELIEVED ABSENT PROPOSED OUTFALL	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVERAGE (if available)		F-OF-ANALYSIS	Frequency of Monitoring (per 1000 hours/yr)	40 CFR Part 136 EPA Approved Method Analysis Used	Detection Limit (µg/L)	Resulting Maximum Daily Flow (CFD)	2. Optional: Subtotal, Surface, Total, CDDO
				CONCENTRATION (µg/L)	MASS (lbs)	CONCENTRATION (µg/L)	MASS (lbs)	CONCENTRATION (µg/L)	MASS (lbs)						
1M Arsenic, Dissolved (7440-39-0)	X			<1.52	N/A					1	Precipitation Based	EPA 200.8	0.6 µg/L	109 4064	
2M Arsenic, Suspended (7440-39-0)	X			<0.30	N/A					1	Precipitation Based	EPA 200.8	0.08 µg/L	109 4064	
3M Beryllium, Dissolved (7440-41-7)	X			<2.20	N/A					1	Precipitation Based	EPA 200.8	0.69 µg/L	109 4064	
4M Cadmium, Dissolved (7440-43-9)	X			<0.08	N/A					1	Precipitation Based	EPA 200.8	0.03 µg/L	109 4064	
5M Chromium, Dissolved (7440-47-3)	X			<1.84	N/A					1	Precipitation Based	EPA 200.8	0.52 µg/L	109 4064	
6M Copper, Dissolved (7440-50-9)	X			<0.50	N/A					1	Precipitation Based	EPA 200.8	0.28 µg/L	109 4064	
7M Lead, Dissolved (7439-92-1)	X			<0.31	N/A					1	Precipitation Based	EPA 200.8	0.1 µg/L	109 4064	
8M Mercury, Total (7439-97-6)	X			<0.010	N/A					1	Precipitation Based	EPA 245.2	0.003 µg/L	109 4064	
9M Nickel, Dissolved (7440-02-4)	X			<8.85	N/A					1	Precipitation Based	EPA 200.8	2.16 µg/L	109 4064	
10M Selenium, Total (7782-49-2)	X			1.31	7.73E-01					1	Precipitation Based	EPA 200.8	0.3 µg/L	109 4064	
11M Silver, Dissolved (7440-22-4)	X			<0.15	N/A					1	Precipitation Based	EPA 200.8	0.05 µg/L	109 4064	
12M Thallium, Dissolved (7440-28-0)	X			<0.08	N/A					1	Precipitation Based	EPA 200.8	0.03 µg/L	109 4064	
13M Zinc, Dissolved (7440-66-4)	X			<18.45	N/A					1	Precipitation Based	EPA 200.8	5.17 µg/L	109 4064	
14M Cyanide, Total (57-12-3)	X			<3	N/A					1	Precipitation Based	SM500 CN <sup>-</sup> E	1 µg/L	109 4064	
15M Phenols, Total	X			<8.0	N/A					1	Precipitation Based	EPA 420.1	2 µg/L	109 4064	

By submission of this form, I/we (FE and applicant) certify that I/we have read the instructions for completion of EPA Forms 2C & 2D. Attach Additional Information As Needed.

1/ For the purpose of demonstration of compliance with these parameters, "Total" and "Total Recoverable" measurements shall be considered equivalent.

2/ Inorganic Hardness (CaCO<sub>3</sub>) will be assumed to be 50 mg/L if Inorganic Hardness data is not submitted.

Sampling results must be representative of the discharge and test methods used in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

Rev 2/1/07

BM) = Below Minimum Level

Cordova Clay collecting samples and McGhee Engineering Corp performing analysis.

Name of Firm(s) and/or Company(s) Collecting Samples And Performing Analysis



Date Printed: 4/10/2017

Client: Cordova Clay Co., Inc.  
P.O. Box 100  
Cordova, AL 35550

Location: Riceton Hill Mine -- 004

Sample Date: 2/10/2017

Sampled By: Client

## REPORT OF FINDINGS

Lab ID: 17022809-01

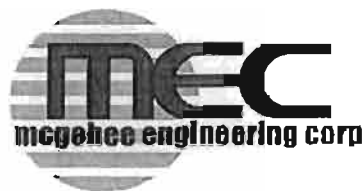
Analyte	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Arsenic, Dissolved	BML	0.27 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Arsenic, Total	0.48	0.27 µg/L	EPA200.8	3/1/2017 1:37:24 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Flow/MGD	0.3014	MGD	EPA5.1	2/10/2017	Cordova Clay Co., Inc.
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	3/14/2017 2:19:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Selenium, Total	1.31	0.95 µg/L	EPA200.8	3/1/2017 1:37:24 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	3/1/2017 1:41:25 PM	KyleThomas

Analysis Approved: 3/16/2017

John Morris  
Laboratory Manager

BML = Below Minimum Level

Page 1 of 1



Date Printed: 4/11/2017

Client: Cordova Clay Co., Inc.  
P.O. Box 100  
Cordova, AL 35550

Location: Riceton Hill Mine -- 004

Sample Date: 2/27/2017

Sampled By: Client

## REPORT OF FINDINGS

Lab ID: 17022810-01

<u>Analyte</u>	<u>Result</u>	<u>Minimum Level / Units</u>	<u>Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	3/6/2017	KyleThomas
Phenols, Total	BML	6.0 µg/L	EPA420.1	3/22/2017	KyleThomas

Analysis Approved: 3/23/2017

A handwritten signature in cursive script that reads 'John Morris'.

John Morris  
Laboratory Manager



Telephone: (205) 384-5553  
Facsimile: (205) 295-3114 • Main Building  
(205) 295-3115 • Water Lab  
Web Address: [www.percengineering.com](http://www.percengineering.com)  
Pete Parrish Direct Dial: 205-295-3100  
Direct Fax: 205-295-3138  
E-mail: [pparrish@percengineering.com](mailto:pparrish@percengineering.com)

March 4, 2016

Hao Nguyen  
Alabama Department of Environmental Management  
Mining and Natural Resources Section, Water Division  
1400 Coliseum Boulevard  
Montgomery, AL 36110-2400

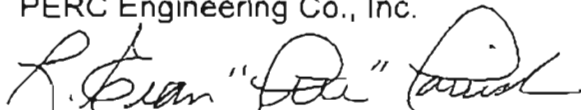
Subject: Application to Reissue NPDES Permit AL0047198 for Cordova Clay Co.,  
Inc., Riceton Hill Mine

Dear Mr. Nguyen:

Attached is the referenced application for reissuance of NPDES Permit AL0047198 along  
with an application fee check in the amount of \$5,820.00.

Please contact me if you have any questions.

Sincerely,  
PERC Engineering Co., Inc.

  
R. Evan "Pete" Parrish

REP

Enclosures: (2) - Application and Application Fee Check

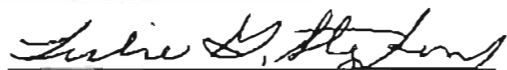


POLLUTION ABATEMENT PLAN  
FOR  
CORDOVA CLAY CO., INC.  
RICETON HILL MINE

Prepared By:

PERC Engineering Co., Inc.  
P.O. Box 1712  
Jasper, AL 35502  
Under The Direction of:



  
Leslie G. Stephens, P.L.S. & P.E.  
AL Reg. No. 14117-E

03/04/2016  
Date

## I. INTRODUCTION

This pollution abatement plan is presented in two parts. The first part includes a brief narrative and general information, while the second part contains the plans that were submitted with the original application on July 20, 1998. Design of the sedimentation control system is intended to address the format as outlined by the Alabama Department of Environmental Management (ADEM), Water Division - Water Quality Control Program, Rules and Regulations and to present the basis for the designs as further detailed in the design plans. Drawings as presented in the design plans were derived from Rules and Regulations of ADEM and from other generally accepted design data sources primarily from the U.S. Department of Agriculture Soil Conservation Service.

Generally, the narrative will follow the outline of Chapters 6-9, Surface Mining Rules and Regulations from the ADEM Rules and Regulations.

## II. OPERATOR

The operator of this mine is Cordova Clay Co., Inc., whose business address is as follows:

Cordova Clay Co., Inc.  
P. O. Box 100  
Cordova, AL 35550

The boundary location of the mine site is shown on the site map provided later in this report.

## III. GENERAL INFORMATION

The Cordova Clay, Inc.'s Riceton mine has recently restarted operations. The permit area is located within the SW 1/4 of SW 1/4, SE 1/4 of SW 1/4, of Section 34, Township 14 South, Range 6 West, NW 1/4, NW 1/4 of SW 1/4 and NE 1/4 of SW 1/4 of Section 3, Township 15 South, Range 6 West, Walker County, Alabama, as found on the Cordova Alabama U.S.G.S. Quadrangle map.

## IV. TOPOGRAPHIC MAP

Design plans submitted with this document provide an existing contour map. The site plan layout shows the general layout of the permit area, sedimentation pond and the effluent discharge locations.

## V. METHOD FOR DIVERTING SURFACE RUNOFF

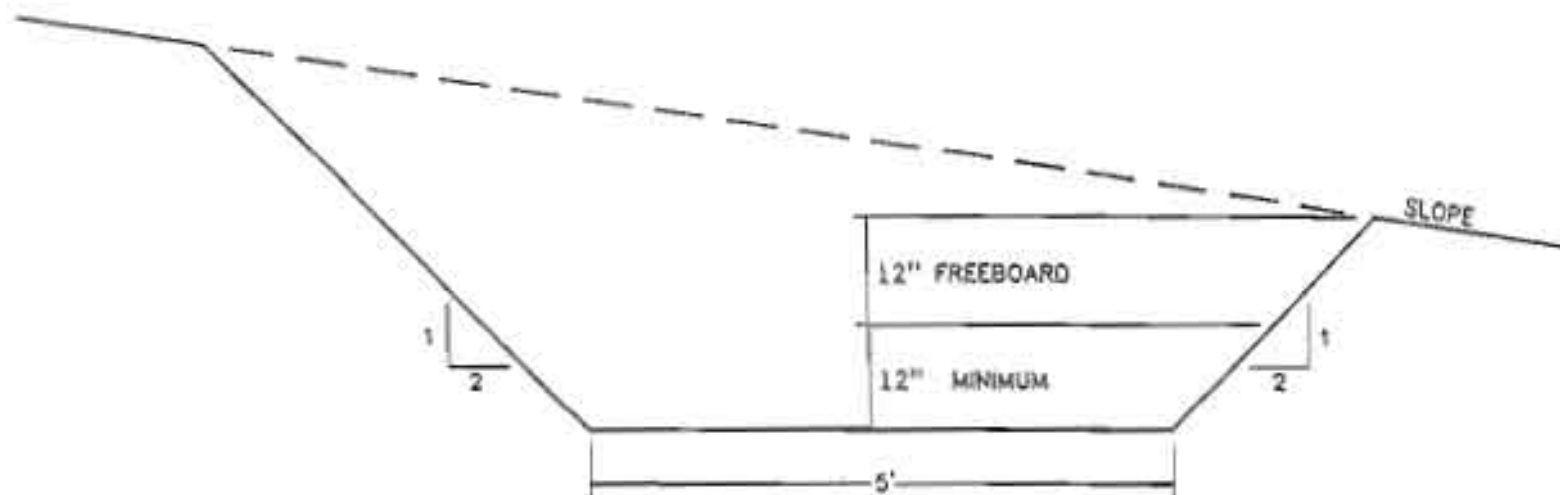
Drainage from the area will be routed to the sedimentation ponds through diversion channels or by berms. Berms and diversions will be designed and constructed in accordance with the following guidelines for diversions. A typical section of proposed diversions and berms is included in this application.

## GUIDELINES FOR DIVERSION CHANNELS AND DIVERSION BERMS

1. Temporary diversions shall be constructed to pass safely the peak runoff from a 2-year, 6-hour precipitation event.
2. To protect fills and property and to avoid danger to public health and safety, permanent diversions shall be constructed to pass safely the peak runoff from a 10-year, 6-hour precipitation event. Permanent diversions shall be constructed with gently sloping banks stabilized by vegetation.
3. Diversions shall be designed, constructed, and maintained in a manner which prevents additional contributions of suspended solids to stream flow and to runoff outside the permit area, to the extent possible, using the best technology currently available. Appropriate sediment control measures for these diversions may include, but not be limited to, maintenance of appropriate gradients, channel lining, revegetation, roughness structures, and detention ponds.
4. No diversion shall be located to increase the potential for land slides and no diversion shall be constructed on existing land slides.
5. When no longer needed, each temporary diversion shall be removed and the affected land regraded, topsoiled, and revegetated.
6. Channel linings, when slopes are between 1-3 percent shall consist of both perennial and annual grasses and when slopes are greater than 3 percent, shall consist of riprap or be cut into non-erodible material.
7. Freeboard shall provide protection for transition of flows and for critical areas such as swales and curves along the entire channel length.
8. Energy dissipators shall be installed, when necessary, at discharge points where natural streams and exit velocity of the diversion ditch flow are greater than that of the receiving stream.
9. The embankment or berm foundation area shall be cleared of all organic matter, all surfaces sloped to no steeper than 1v:1h and the entire foundation surface scarified.
10. The entire embankment or berm shall be compacted to 95% density, based on standard proctor as outlined in ASTM.

GUIDELINES FOR DIVERSION CHANNELS  
AND DIVERSION BERMS  
(CONTINUED)

11. The material placed in the berm shall be free of sod, roots, stones over 6 inches in diameter, and other objectionable materials. The fill material shall be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 12 inches in thickness. Construction of the fill shall be undertaken only at such times as the moisture content of the fill material will permit satisfactory compaction in accordance with paragraph 13.
12. The berm and all disturbed areas shall be seeded with both perennial and annual grasses to insure that erosion is minimized. Hay bales or riprap may be placed at the toe of the berm immediately upon completion of construction.
13. All berms shall be examined quarterly for structural weakness, instability, erosion, or other hazardous conditions and maintenance performed as necessary.



## DIVERSION DITCH

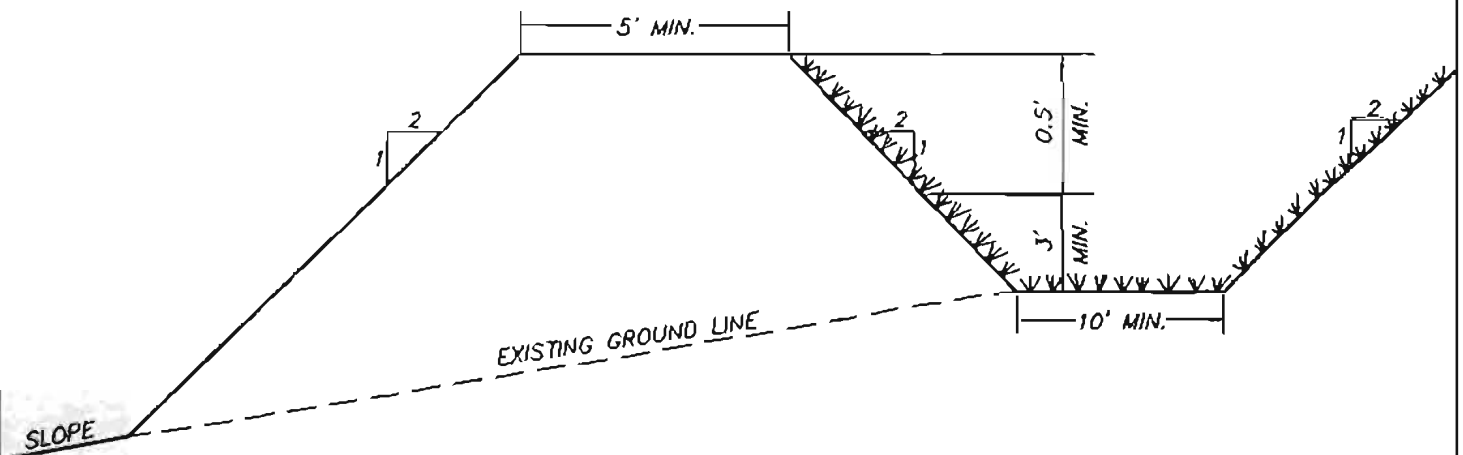
TYPICAL DIVERSION CROSS-SECTION

NO SCALE

CHANNEL LINING TO CONSIST OF A MIXTURE OF FESCUE AND BERMUDA GRASS

## DIVERSION/BERM DETAIL

DIVERSION A-A'



### TYPICAL DIVERSION/BERM CROSS SECTION

CHANNEL LINING TO CONSIST OF A MIXTURE OF BERMUDA AND FESCUE GRASSES

Note: The berm material is to consist of a clay material. The Material will be placed in 6 inch lifts and compacted to 95% of the standard proctor density. The standard proctor density will be determined prior to the placement of the material.



### Typical Diversion Berm Detail

DRAWN BY: J.J.H.  
DWG. NAME: BRMTYP1

DATE: 1-23-97

APPROVED BY: S.R.I.

SCALE: NONE

## VI. RAW MATERIALS, PROCESSES AND PRODUCTS

Clay, shale, and coal are the only raw materials that are mined at the Riceton Hill Mine. As mining operations are continued at this site they will be located within the NE 1/4 of NW 1/4 and NW 1/4 of NW 1/4, of Section 3, Township 15 South, Range 6 West, as shown on the attached 1" = 500' scale location map. All surface water runoff from development disturbances will be allowed to drain to Basin 004E.

## VII. WASTE TREATMENT FACILITIES

The treatment process for water quality control is by sedimentation ponds. The ponds are earthen and will be constructed in accordance with the ADEM Rules and Regulations.

Removal of sediment will be initiated when the sediment accumulation reaches 60% of design capacity.

Sediment Ponds will be designed and constructed in accordance with the following Pond Construction Criteria. Typical sections of proposed sediment pond construction are included in this application.

## VIII. SEDIMENT CONTROL FOR ROADS

The haul roads within the mining area will drain to the sediment ponds. Haul roads outside the mining area will not have any sediment ponds, but will conform to ADEM guidelines on extended grades and will not involve any significant earthfills or cuts.

## IX. LOCATION OF ALL STREAMS ADJACENT TO MINING AREA

Included with the NPDES application preceding this pollution abatement plan is a drawing which has been reproduced from the U.S.G.S. quad sheet at a scale of 1" = 2000' which shows the adjacent streams.

## X. NON-POINT SOURCE POLLUTION

By grading the disturbed areas so that the drainage will carry runoff to the sediment pond, non-point sources of pollution will not result from this project.

## XI. PUBLIC WATER SUPPLY IMPOUNDMENT

The eventual receiving stream is the Mulberry Fork. All sediment basins discharge to a public water supply.

## XII. SEDIMENTATION CONTROL

Appendix A and B of the ADEM rules and regulations presents general guidelines which have been used for the design of the sedimentation ponds. Engineering calculations, tables, charts and the basis for the design are presented for review on the following pages in order to demonstrate compliance.

## POND CONSTRUCTION CRITERIA

The embankment for sediment ponds (temporary and permanent) shall be designed and built using the following as minimum criteria:

1. The top of the dam shall be no less than 12 feet wide.
2. See design sheet for maximum and minimum embankment slopes.
3. The foundation and abutments for the impounding structure shall be designed to be stable under all conditions of construction and operation of the impoundments.
4. The dam shall be constructed with a cutoff trench based upon prudent engineering practices for the site. The cutoff shall be located on the dam centerline and be of sufficient depth to extend into a relatively impervious material from which the core of the dam shall also be constructed.
5. The embankment foundation area shall be cleared of all organic matter, all surfaces sloped to no steeper than 1v:1h, and the entire foundation surface scarified.
6. The entire embankment and cutoff trench shall be compacted to 95 percent density, based on standard proctor as outlined in ASTM.
7. The material placed in the embankment shall be free of sod, roots, stones over 6 inches in diameter, and other objectionable materials. The fill material shall be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 12 inches in thickness. Construction of the fill shall be undertaken only at such times that the moisture content of the fill material will permit satisfactory compaction in accordance with paragraph 5.
8. The pool area of the pond will be cleared of timber and large undergrowth.
9. The primary decant system when consisting of a pipe shall be installed according to Class C pipe installation for embankment bedding.
10. The primary decant system shall be equipped with a device, or constructed, such as to insure that subsurface withdrawal is accomplished to prevent discharge of floating solids. If a channel is used as the primary decant a skimmer shall be installed to prevent floating solids from discharging.
11. A splash pad or riprap may be required under the discharge of the primary decant system where necessary to insure that the discharge does not erode the embankment.

POND CONSTRUCTION CRITERIA  
(CONTINUED)

12. The combination primary and secondary decant system shall be designed to safely carry the expected peak flow from a 25 year - 24 hour storm. The entire emergency overflow spillway channel will be a stabilized channel and will be stabilized upon completion of construction as specified within the detailed design plans using prudent engineering measures. These measures may consist of lining the spillway with concrete or a durable rock riprap, or the spillway being constructed in consolidated non-erodible material and planted with a mixture or both annual and perennial grasses, or a combination of any or all of the above.
13. Sediment ponds using a single spillway system shall be an open channel of non-erodible construction consisting of concrete, durable rock riprap or its being constructed in consolidated non-erodible material as specified in the detailed design plans.
14. The settled embankment for temporary impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year - 24 hour, or a 10 year - 24 hour precipitation event (whichever has the greatest runoff). The settled embankment for permanent impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year - 24 hour, or a 10 year - 24 hour precipitation event (whichever has the greatest runoff).
15. If ponds are built in series, then the combined decant system for each shall be designed to accommodate the entire contributing drainage area.
16. The dam and all disturbed areas shall be seeded with both perennial and annual grasses, fertilized and mulched in order to insure erosion is minimized. Hay bales or riprap may be placed at the toe of the dam immediately upon completion of construction.
17. The constructed height of the dam shall be increased a minimum of 5 percent over the design height to allow for settlement over the life of the embankment.
18. Final graded slopes of the entire permanent water impoundment area will be as such to provide adequate safety and access for proposed water users.
19. Prior to Phase II bond release, additional data concerning water quality, water quantity, depth, size, configuration, postmining land use, etc., for each proposed permanent water impoundment, shall be submitted to the Regulatory Authority for permanent water impoundment approval.
20. All sediment ponds will be inspected for stability, erosion, until removal of the structure or release of the permit.

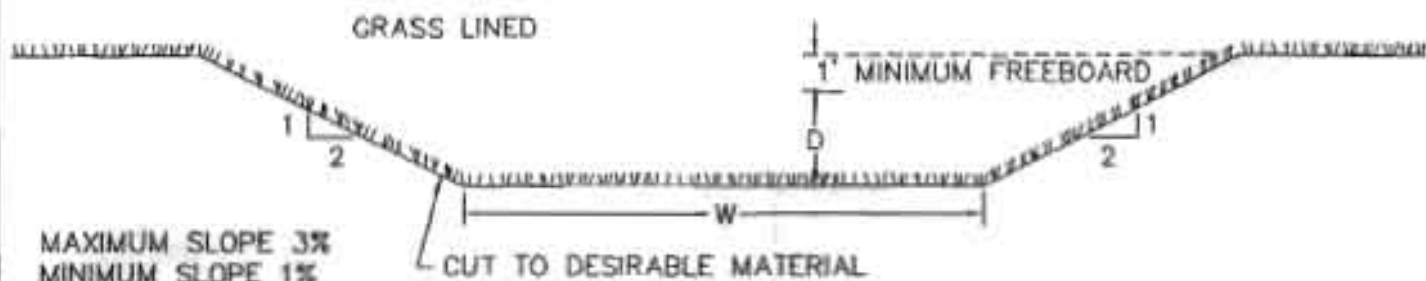
POND CONSTRUCTION CRITERIA  
(CONTINUED)

21. The embankment and spillway will be maintained by repairing any damage such as erosion, slope failure or spillway damage until removal of the structure or release of the permit.
22. Sediment will be removed from each pond when the accumulated sediment reaches the sediment storage volume as shown on the detailed design sheet.
23. Upon completion of mining, successful reclamation and effluent standards being met, each sediment pond not remaining as a permanent water impoundment will be dewatered in an environmentally safe manner (such as siphoning, pumping, etc.) and reclaimed to approximate original contours by the following procedure:  
A permanent diversion channel (designed for a 10 year - 24 hour precipitation event) shall be cut along the outer edge of the pond to re-route drainage around the pond and back through the stabilized spillway to allow reclamation of the sediment pond. The diversion channel shall be designed and grassed as per enclosed information. (See permanent diversion for pond disposal). Upon completion of the diversion channel the back slope of the dam shall be graded to a minimum 3H to 1V slope. The dewatered sediment pond area shall be seeded with some combination of the following: Fescue, bermuda, rye grass, canary grass and willows. After seeding the area shall be mulched. Any additional sediment or embankment material not used to meet original contour, if non-toxic, shall be spread in thin layers within the permit area and vegetated.









$$Q = \frac{1.49}{N} A R^{2/3} S^{1/2}$$

$N(\text{loose stone or grass lined}) = 0.035$   
 $A = \text{area}$   
 $R = \text{area/wetted perimeter}$   
 $S = \text{slope}$

\* Grass lining: fescue, bermuda, rye grass

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 8.0 Ft.	
PEAK FLOW Q (CFS)	DEPTH D (Ft.)
0-15	0.5
15-50	1.0
50-100	1.5
100-180	2.0
180-270	2.5

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 10.0 Ft.	
PEAK FLOW Q (CFS)	DEPTH D (Ft.)
0-15	0.5
15-60	1.0
60-120	1.5
120-210	2.0
210-320	2.5

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 12.0 Ft.	
PEAK FLOW Q (CFS)	DEPTH D (Ft.)
0-20	0.5
20-70	1.0
70-150	1.5
150-250	2.0
250-383	2.5

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 15.0 Ft.	
PEAK FLOW Q (CFS)	DEPTH D (Ft.)
0-25	0.5
25-90	1.0
90-180	1.5
180-300	2.0
300-450	2.5



### PERMANENT DIVERSION CHANNEL FOR BASIN DISPOSAL

DRAWN BY:  
DWG. NAME:

DATE:

APPROVED BY:

SCALE:

ATTACHMENT III-B-2-A

WATER CONTROL PROCEDURE

SURFACE RUNOFF WATER WILL OCCUR DURING AND AFTER PERIODS OF PRECIPITATION. IN ORDER TO PREVENT THE WATER WHICH HAS COME IN CONTACT WITH POLLUTANTS FROM THE MINING OPERATIONS FROM GETTING INTO NEARBY STREAMS THIS WATER WILL BE CHANNLED THROUGH THE PIT INTO SEDIMENTATION PONDS. THIS WILL BE DONE BY FORMING THE SPOIL BANK INTO A CONTINUOUS DIKE AROUND THE MINING OPERATION AND SLOPING THE FRONT FACE OF THE DIKE AND PIT FLOOR TOWARD THE HIGHWALL OR CUT FACE. THE RUNOFF WATER WILL THEN BE CHANNLED THROUGH A SELECTED OPENING IN THE SPOIL BANK DIKE AND INTO A DITCH LEADING TO A SEDIMENTATION POND (SEE FIGURE 1).

THE MINERALS WILL BE TAKEN FROM THE GROUND IN A STRIP MINING OPERATION WHEREBY THE OVERBURDEN (CONSISTING OF EARTH AND ROCK) IS REMOVED FROM OVER THE CLAY IN SUCCESSIVE CUTS (SEE FIGURE 2). AFTER A CUT OF OVERBURDEN HAS BEEN REMOVED, THE CLAY WILL BE LOADED ONTO TRUCKS AND HAULED AWAY. ANOTHER CUT WILL THEN BE MADE PLACING ITS OVERBURDEN WHERE THE PREVIOUS CUT WAS MADE. THIS PROCEDURE WILL BE FOLLOWED UNTIL THE CLAY SEAM PLAYS OUT, OR EXCESSIVE HEIGHT OF OVERBURDEN IS REACHED.

THE SEDIMENTATION PONDS HAVE BEEN DESIGNED TO RETAIN ALL NORMAL SURFACE RUNOFF FROM AREAS BEING MINED. VOLUMES OF THE SEDIMENTATION PONDS ARE BASED ON ONE QUARTER ACRE FOOT OF VOLUME PER ACRE OF RUNOFF AREA. DETENTION TIME FOR MOST RUNOFF PERIODS SHOULD BE SUFFICIENT TO ALLOW PROPER SEDIMENTATION OF POLLUTANTS. ADDITIONAL TREATMENT WILL BE UNDERTAKEN IF IT BECOMES APPARENT MORE IS NEEDED. SHOULD IT BECOME NECESSARY TO CLEAN THE PONDS, IT WILL BE DONE BY REMOVING SEDIMENTS TO A LOCATION UPSTREAM FROM THE POND SO THAT POLLUTANTS WILL NOT ESCAPE TO NEARBY STREAMS.

WHEN MINING OPERATIONS ARE COMPLETED IN AN AREA DRAINING INTO A SEDIMENTATION POND, THE POND WILL BE ALLOWED TO STAND UNTIL SOLIDS AND IMPURITIES HAVE SETTLED. IF NO FURTHER TREATMENT IS NECESSARY, THE STORED WATER SHALL BE RELEASED. IF THE STORED WATER REQUIRES TREATMENT IN ORDER TO OBTAIN DESIRED QUALITY, IT SHALL BE TREATED AND THEN RELEASED. AFTER THE WATER HAS BEEN RELEASED, THE SEDIMENTATION POND BED WILL BE COVERED WITH A MINIMUM OF THREE FEET OF EARTH FREE FROM MINING IMPURITIES AND GRASSED WHERE NECESSARY TO PREVENT EROSION.

THE BASIN OR BASINS WILL BE REMOVED AFTER APPROVAL OF THE REGULATORY AUTHORITY. BASINS LEFT AS PERMANENT IMPOUNDMENTS AFTER RECLAMATION AND REVEGETATION SHALL SO BE DESIGNATED AND REQUESTED IN WRITING TO THE RA.

COPIED FROM ORIGINAL NPDES PERMIT  
— APPLICATION  
CERTIFIED BY B. M. ROBERTS



# PLAN OF RUNOFF SEDIMENTATION

## TYPICAL SECTION DRAINAGE DITCH

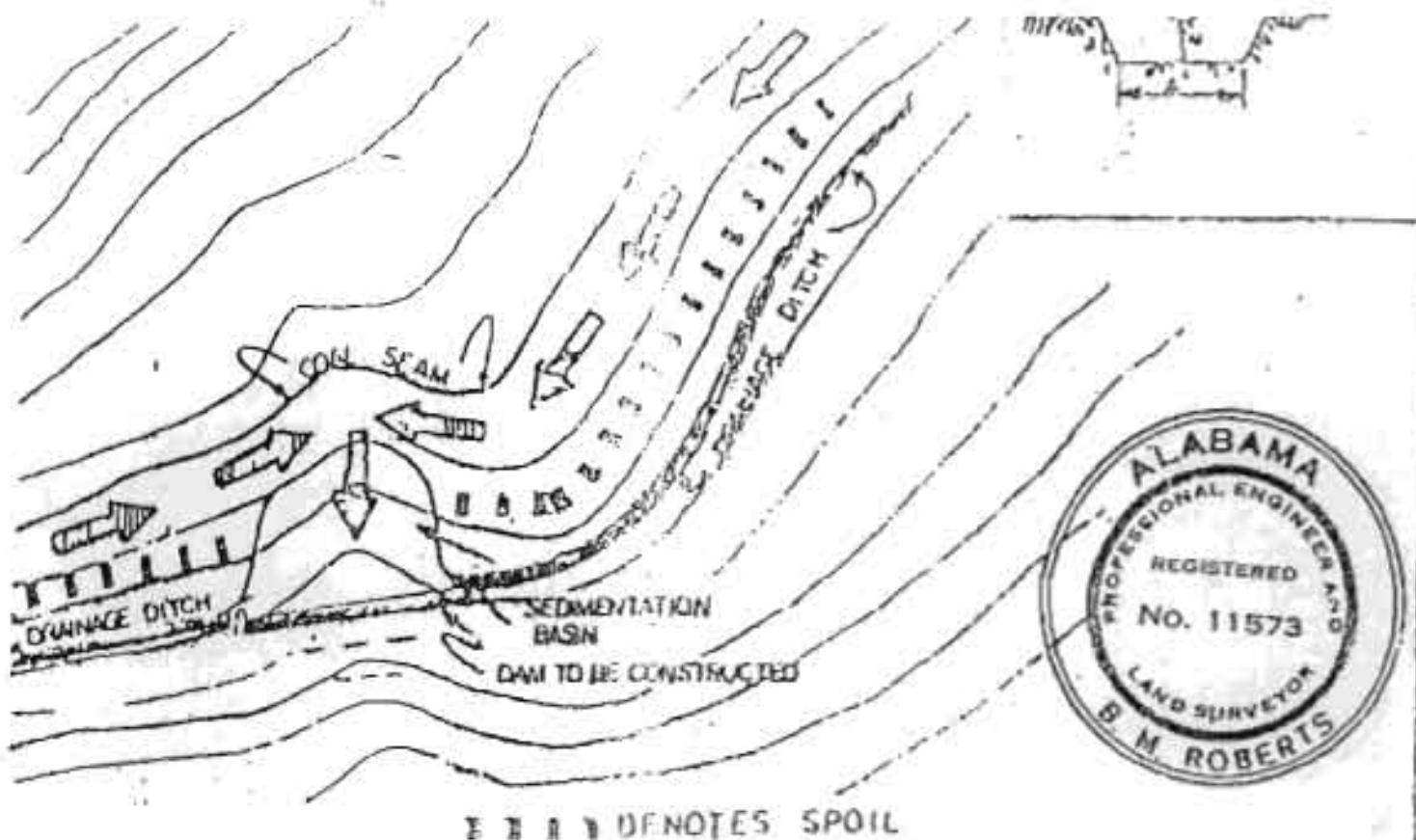


FIGURE 1

## SECTIONAL VIEW OF MINING OPERATION

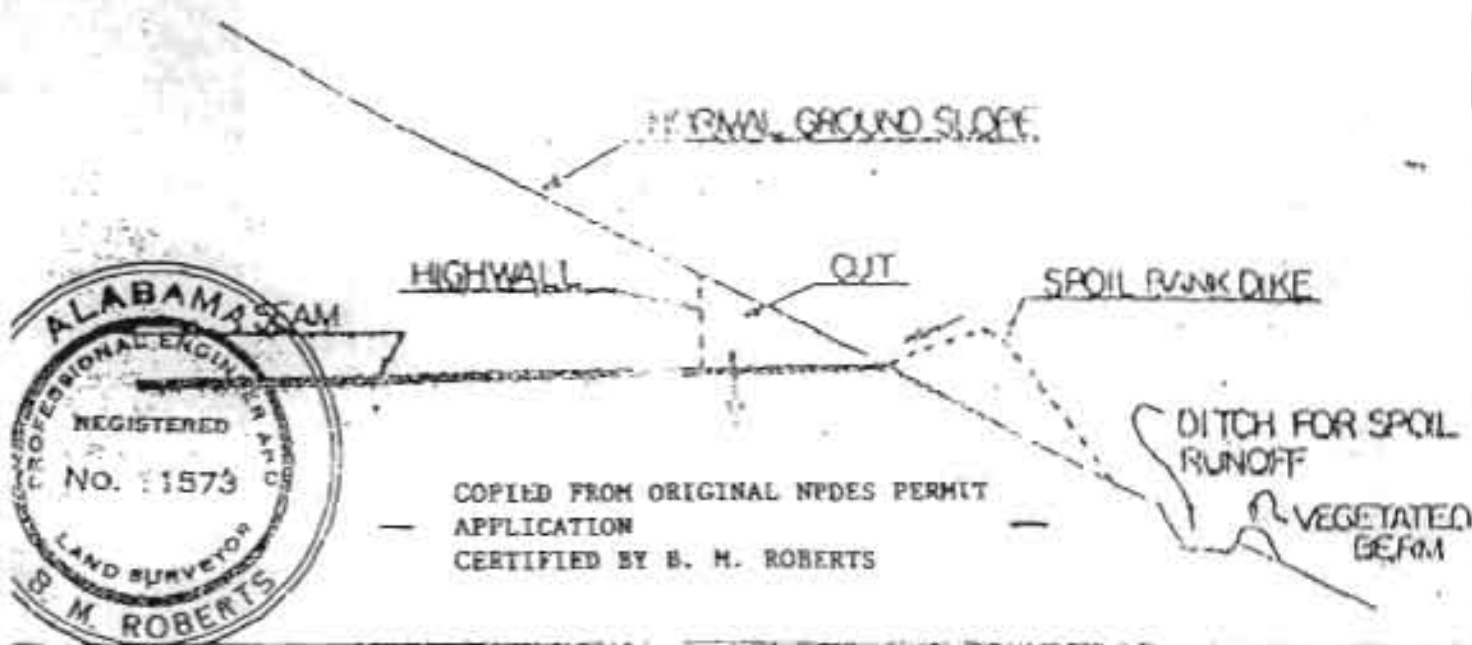


FIGURE 2

# SEDIMENTATION POND SPECIFICATIONS

1. The dam shall be constructed of compacted clay, or with a clay core which extends a minimum of 2' into an impervious material. All material shall be compacted to 95 percent density as established by AASHTO T-99.

The fill material shall be free of sod, roots, stones over 6 inches in diameter and other objectionable materials. The fill material should be placed and spread over the entire fill area, starting at the lowest point of the foundations, in layers not to exceed 12 inches in thickness. Construction of the fill should be undertaken only at such times that the moisture content of the fill material will permit satisfactory compaction in accordance with AASHTO T-99.

2. The top of the dam shall be a minimum of 12 feet wide. Side slopes on each side of the dam shall not exceed 3:1.
3. Spillpipe is to be of the size shown on the drawing for each dam site. The pipe shall be equipped with anti-weep collars at each joint which radiate at least 2 feet from the pipe in all directions. The collars and their connections to the pipe should be watertight.
4. Bottom of spillway pipe is to be placed at the elevation of maximum water level as shown on drawing for each dam site. Each pipe shall be constructed with a "Tee" or "El" on the inlet end to insure that no floating solids are discharged. A splash pad or riprap shall be placed under the discharge of the spillpipe, or the location of the discharge set, so as to insure that the discharge does not erode the dam.
5. Spillway pipe is to be placed near the end of dam as shown for each dam site and so oriented that water from the pipe will flow in a ditch constructed in undisturbed soil in a natural drainage channel.
6. After construction the dam shall be seeded with both perennial and annual grasses. Hay bales or riprap shall be placed at the toe of the dam.
7. Spillway pipe are sized to handle surface flow that might be expected at each basin site. They should be placed at the location and elevation shown on the plans. Overflow spillways have been designed for 25 year frequency floods and should be constructed at the location shown on the drawings and at the elevation of the top of the spillway pipe. Both, spillway pipe and overflow spillway, shall be placed and constructed in undisturbed soil and the runoff channelled so that the dam will not be harmed.
8. The slope of the entrance and exit to the emergency overflow shall not exceed 3 percent. The emergency overflow shall be constructed with a control section at least 20 feet long. The side slopes of the emergency overflow shall not be steeper than 2:1. The emergency overflow should be riprapped or concreted in order to prevent erosion.
9. There should be a minimum of 1½ feet of freeboard between the normal overflow and the emergency overflow. There should be at least 1½ feet of freeboard between the maximum design flow elevation in the emergency overflow and the top of the dam.

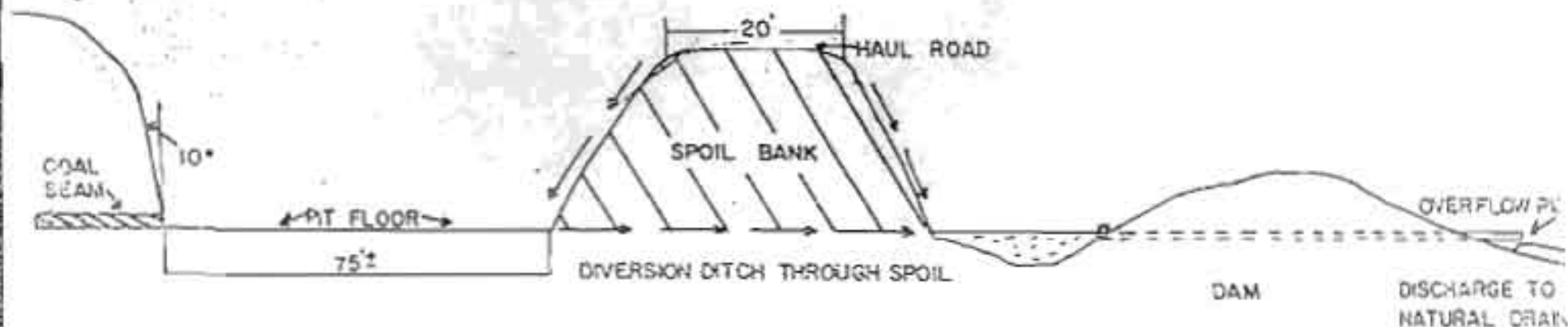
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APPLICATION  
CERTIFIED BY B. M. ROBERTS

HAUL ROAD SPECIFICATIONS

1. No sustained grade shall exceed 10 percent.
2. The maximum grade shall not exceed 15 percent for 300 feet. There shall not be more than 300 feet of 5 percent maximum grade for each 1000 feet of road constructed.
3. Haul roads within the mining area shall be constructed so that run-off from the road passes through a sedimentation basin.
4. Outer slopes for haul roads out of the permitted area shall not be steeper than 2:1 and shall be seeded with both annual and perennial grasses with at least 80 percent cover to avoid erosion. Where this is not possible, basins, hay filters, or diversion ditches shall be cut, built, or placed to intercept run-off.
5. Roads shall be surfaced with either slag, chert, crushed limestone, crushed sandrock, or red rock.
6. Stream crossings shall be avoided when possible; however, crossings which are necessary are detailed in the plans.

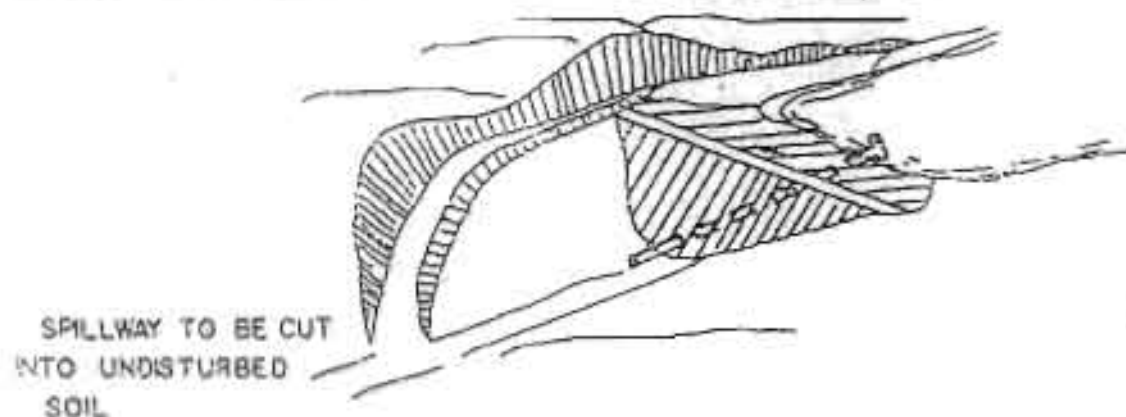


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## TYPICAL SECTION OF SURFACE DRAINAGE CONTROL

### PLAN



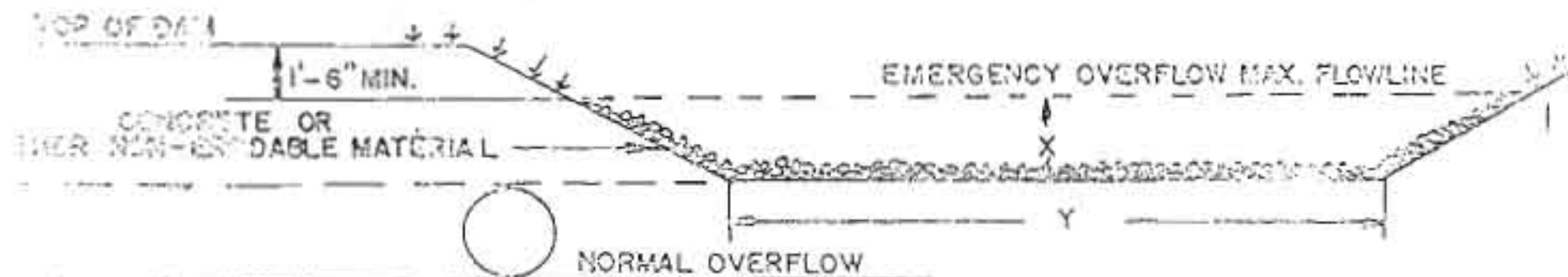
## TYPICAL CROSS VALLEY DAM WITH ADJACENT SPILLWAY



PREPARED BY NINE CONSULTANTS  
PELHAM, AL.

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## TYPICAL OVERFLOW SECTION



NOTES: THE SLOPE OF THE ENTRANCE AND EXIT TO THE EMERGENCY OVERFLOW SHOULD NOT EXCEED 3%. THE EMERGENCY OVERFLOW SHOULD BE RIP-RAPPED OR CONCRETED IN ORDER TO PREVENT EROSION. EMERGENCY SPILLWAY DESIGNED TO CARRY AT LEAST PEAK FLOW OF A 25 YEAR FLOOD. THE CONTROL SECTION OR LENGTH OF THE SPILLWAY SHOULD BE AT LEAST 20' LONG.

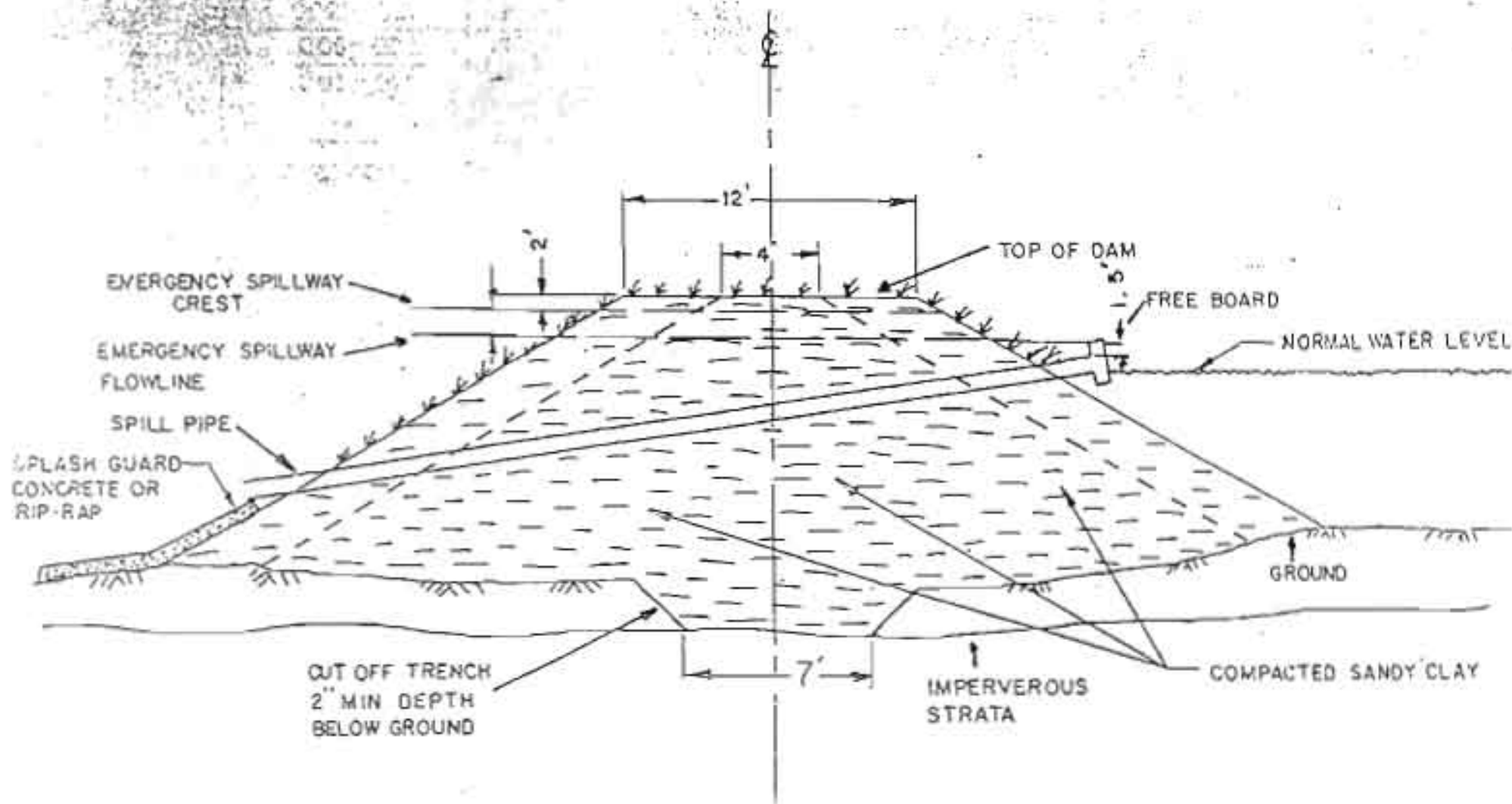
THE SPILLWAY SHALL BE LOCATED ON EITHER END OF EARTH DAM IN UNDISTURBED SOIL WHERE LOCAL CONDITION PERMIT.

THE SPILLWAY SHALL BE CONSTRUCTED TO A MINIMUM DEPTH OF 18" BETWEEN THE TOP OF THE DAM AND THE MAX. FLOWLINE. SLOPES ON THE SIDES OF THE SPILLWAY SHALL BE 2:1. THE SPILLWAY AREA OF THE DAM SHALL BE COVERED WITH RIP-RAP TO PREVENT EROSION.

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NO	DRAINAGE AREA	X'	Y'
1	0 - 150 AC.	1	5
2	150 - 400 "	2	2
3	400 - 800 "	3	3
4	800 - 1300 "	4	3.5





## TYPICAL CROSS SECTION

### EMBANKMENT DAM

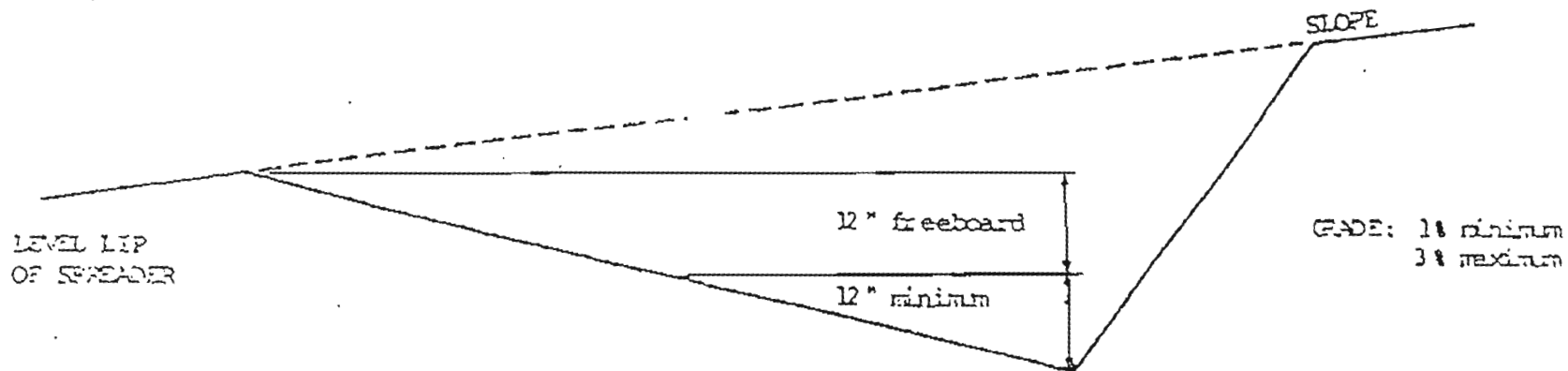
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TEMPORARY DIVERSION TO DIVERT RUN OFF :

## DIVERSION DITCH



TYPICAL DIVERSION CROSS-SECTION  
NO SCALE

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Telephone: (205) 384-5553  
Facsimile: (205) 295-3114 - Main Building  
(205) 295-3115 - Water Lab  
Web Address: [www.percengineering.com](http://www.percengineering.com)

March 2, 2016

Mr. Stephen Miles, P.E.  
ALABAMA SURFACE MINING COMMISSION  
Post Office Box 2390  
Jasper, Alabama 35502-2390

RE: Application for Exemption (880-X-2E)  
Cordova Clay Company, Inc.  
Riceton No. 3 Clay Mine

Dear Stephen:

Enclosed please find the above mentioned application. The site is located in Walker County near Cordova, Alabama. The marketable coal seams in this area are the New Castle and Mary Lee Seams that has been mined in this vicinity in years past. However no New Castle Coal Seam existing within this Exemption Boundary.

Please keep all marketing information, for all marketable products, in confidence in your file as this would be greatly appreciated by Cordova Clay Company, Inc..

If you have any questions regarding this application, please do not hesitate to contact me at 295-3127 or [lstephens@percengineering.com](mailto:lstephens@percengineering.com). Your prompt consideration for this application would be appreciated.

Sincerely,  
PERC Engineering Co., Inc.

A handwritten signature in black ink, appearing to read 'Leslie G. Stephens', written over a light gray rectangular background.

Leslie G. Stephens, P.E. & P.L.S.  
for Cordova Clay Company, Inc.

Application Attachment



P.O. Box 1712 • Jasper, Alabama 35502

0496 1496 0000 0000 5702



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H/O MONTGOMERY

Adem Mining & Nat Res Section Water Div  
1400 COLISEUM BLVD  
MONTGOMERY AL 36110-2400

**RECEIVED**

MAR 07 2016

ADEM FRONT DESK